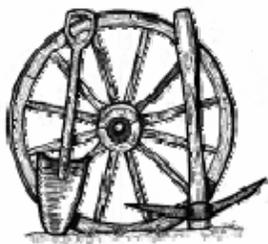


Tempe Post-World War II Context Study

Final Draft

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I. INTRODUCTION

Tempe has long had an appreciation for its historic buildings. In 1924, Sallie and Mary Hayden hired Robert Evans, a prominent Phoenix architect, to restore their father's home. With the first restoration of an historic house in Arizona, the old Charles Hayden House was transformed into a landmark restaurant known as *La Casa Vieja*, or "the old house."

In the late 1970s, as the City began an ambitious downtown redevelopment program, many citizens grew concerned that new construction threatened to destroy all of Tempe's original buildings along Mill Avenue. A vigorous lobbying campaign persuaded the City Council to rehabilitate rather than raze three territorial-era buildings: the Andre Building, Petersen-Chipman Building, and Vienna Bakery. The Tempe Historical Society took the initiative in establishing a long-term plan for historic preservation by obtaining a grant from the Arizona State Historic Preservation Office to identify the most significant buildings and structures in Tempe. Society volunteers worked under the direction of the architectural firm of Janus Associates to help produce the Tempe Historic Property Survey in 1983.

In the 1990s, the City Council and Staff began to embrace the concept of historic preservation as a planning tool. The Council adopted an Historic Preservation Ordinance in 1995, setting the first official preservation policy for the city. The ordinance created an Historic Preservation Commission, provided a procedure for review of actions that would alter or demolish historic buildings, and established the Tempe Historic Property Register. The City's efforts to acquire and protect historically important buildings has resulted in the rehabilitation and public use of four local landmarks: the Hackett House, the Petersen House, the Governor B. B. Moeur House, and the Elias-Rodriguez House.

In the 1980s, Susan Harter emerged as the most passionate advocate for preserving Tempe's architectural heritage. She was instrumental in establishing Tempe's first neighborhood associations, for she felt that the best way to protect historic homes was to preserve the neighborhoods in which they stand. That approach is particularly appropriate to the challenge of preserving Tempe's post-World War II subdivisions, where many of the homes are now turning fifty years old. The thousands of houses that were built at mid-century can only be studied and protected within the context of their subdivision and its builders, its streetscape, and all of its unique elements that help define each neighborhood.

II. METHODOLOGY

The approach taken by the Tempe Post-World War II Context Study was to build upon the existing literature relating to the history of the built environment in Tempe. The original 1983 Tempe Historic Property Survey and Multiple Resource Area Nomination provides a thorough narrative history of Tempe, with emphasis on the development of the original townsite. The 1997 Tempe Multiple Resource Area Update expands that narrative and continues it through 1945. Two recent studies by students in the Arizona State University Public History Graduate Program, "A Historic Preservation Survey and Inventory of Post-World War II Subdivisions in Tempe, Arizona" (Moore, Neilan, Winter, Bayes, Purcell, and Cecchi, 1997) and "Campo Allegre Historic Property Survey" (DeSalvo, Lissoway, McCune, and Peterson, 2000) provide some analysis of the post-1945 period. However, fundamental demographic and economic shifts in Tempe after World War II required the development of new historical contexts that would apply to the more recent era.

Historical research was oriented toward the development of a broad narrative history of Tempe from 1945 to 1960. Published histories of Tempe, central Arizona, and Arizona State University were examined. Most primary sources needed for this study were found at the Tempe Historical Museum, which maintains manuscript materials, and compiled research files and databases, including detailed information on schools, churches, businesses, and individuals. The museum also holds the original building permit files of the City of Tempe. Other research facilities that were visited include Arizona State University Department of Manuscripts and Archives, Tempe Public Library, and the Tempe Development Services Department. Materials obtained from the Maricopa County Recorder include copies of all recorded subdivision plats for areas in Tempe that were filed between 1944 and 1960, as well as plats of some earlier subdivisions that were still being developed during the period. Also of importance to this study were records of individual parcels that are maintained by the Maricopa County Assessor, which include the dates of original construction of buildings, and details such as the size and key features of the properties. The absence of any detailed written history of the post-World War II era in Tempe required an extensive survey of Tempe Daily News from 1945 to 1960. This was a most valuable resource, as the newspaper provided detailed accounts of new subdivisions that were being developed, issues relating to annexation and development of municipal services, as well as construction of individual buildings. Secondary sources on postwar architecture, social history, and federal housing policy were found at ASU's Architecture Library and Hayden Library.

The field survey included an examination of approximately 4,500 properties that were built in Tempe between 1946 and 1960. From this survey, inventory forms were completed for 62 subdivisions and nearly 1,800 individual properties. Only those houses that portray the highest level of architectural integrity (i.e., that still possess all elements of their original design) were included. Considering the nature and scope of this project, this inventory is not intended to provide detailed documentation of every property that could be a potential contributor to an historic district; it is more an effort to identify the best examples of the architecture and other aspects of housing that characterize each neighborhood. Inventory forms are not necessarily

detailed or complete, as the primary purpose of the field survey was to provide data for establishing the architectural history of subdivisions rather than of individual properties.

Each postwar subdivision was evaluated for its historic and architectural significance, and its integrity. The significance of a subdivision was determined by its relation to historic themes, such as community planning and development, federal housing policy, or association with prominent builders and developers. The evaluation of a neighborhood's integrity was based on several factors, including the proportion of individual properties that possess a high level of integrity, the presence of all of a subdivision's key non-residential elements (streets, vegetation, irrigation system, etc.), and the absence of any significant non-conforming encroachments in the residential areas.

This study does not provide the depth and detail of documentation that is required for a National Register nomination. Rather, it is intended to convey a broad contextual view of Tempe and its neighborhoods during the post-World War II era to help City staff and the Historic Preservation Commission, as well as home owners and neighborhood associations, to examine, assess, and appreciate Tempe's postwar architecture.

III. HISTORICAL OVERVIEW

HISTORIC BACKGROUND

The community that would become known as Tempe began in 1870 when the first group of homesteaders settled on the south side of the Salt River. For several years this settlement was little more than a cluster of tents and shacks. It was inhabited by a very diverse group, made up mostly of Hispanic men who were born in Arizona or California when the region was still a part of Mexico; they were joined by former Confederate soldiers, European immigrants, and farmers from Missouri. Together they formed the Hardy Irrigating Canal Company, a cooperative venture established for the purpose of digging a network of irrigation canals. Reorganized in 1871 as the Tempe Irrigating Canal Company, the organization provided the discipline and coordination of effort that the settlers needed to quickly achieve their goal. Shareholders often had to spend more time constructing ditches than they did building their own homes and clearing fields, but their labor was soon rewarded when they were able to divert as much water as they needed onto fertile farmland. By 1880, homestead claims spread several miles to the south, encompassing most of the land within the present-day boundaries of the city.

One early resident who had a profound impact on the development of the community was Charles Trumbull Hayden, a Tucson merchant who filed a homestead claim for land in Section 15 straddling both banks of the Salt River. Hayden built a general store, an inn, a flour mill, and a cable-operated ferry crossing the Salt River. In 1876, he moved his successful freighting business from Tucson to his new outpost, which was known as Hayden's Ferry. Blacksmiths' and carpenters' shops, warehouses, and boarding houses for employees were soon built near the south bank of the river. In just a few years, Hayden provided a strong commercial foundation for the fledgling town, and his mill and freight wagons provided a means of marketing locally grown crops throughout the territory.

Originally, Tempe was the name of the large irrigation district that was served by the Tempe Canal. It gradually became the name associated with a sprawling community that encompassed several small settlements, including Hayden's Ferry, a small Hispanic town on the south side of Tempe Butte known as San Pablo, and the Johnson Homestead, an enclave of Mormon families located a half mile to the south. Though it was sparsely populated, a number of key events in the mid-1880s hastened Tempe's development as an important urban center. In 1885 the Territorial Legislature authorized the creation of the Territorial Normal School, a small teachers' college that progressively grew in size and importance. In 1887, the Maricopa and Phoenix Railroad was built. This spur line, which connected Phoenix with the Southern Pacific mainline, passed through Tempe because it was the best site for a bridge across the Salt River. Shortly after the arrival of the railroad, a group of investors formed the Tempe Land and Improvement Company. They bought and subdivided land, and began promoting the sale of lots in their neatly planned townsite. By the 1890s, scores of new settlers were arriving. A small business district developed along Mill Avenue between 2nd and 5th streets, and houses were built on the side streets, with neighborhoods extending as far south as 8th Street (University Drive). Two early subdivisions, Farmer's Addition (1886) on the southwest and Goldman's Addition (1887) on the

southeast, extended the orderly grid of streets and lots down to 13th Street. The town of Tempe was incorporated in 1894. The advent of local government brought more civic improvements, such as a domestic water system and regularly graded roads.

While Phoenix pursued its dream of becoming the leading commercial and political center of Arizona, Tempe remained strongly committed to agriculture. The fields surrounding Tempe were productive and profitable. Initially, Tempe's prosperous economy was based on year-round production of alfalfa and grain. After 1912, local farmers shifted to cotton production. Two cotton gins were built within the city limits, and buying agents for eastern mills opened offices on Mill Avenue. There was an immediate boom in the growing of highly profitable Pima long-staple cotton. However, a global post-World War I depression loomed, and cotton prices suddenly plummeted. The Cotton Crash of 1920 was a devastating blow for Tempe and all of central Arizona. Farmers defaulted on their loans, and businesses that relied on their patronage went bankrupt. It would take two decades for Tempe to fully recover from this catastrophe.

After 1920, Tempe continued to grow at a steady but slow rate. Construction of the Tempe State Bridge (Ash Avenue Bridge) in 1913 and the Bankhead National Highway in 1914 allowed the town to maintain its prominent position as a key transportation corridor. The normal school was renamed Arizona State Teachers College, and became one of the largest employers in Tempe. By the late 1920s, downtown merchants started enlarging and remodeling their buildings, with many incorporating elements of the popular new Spanish Colonial Revival style into the facades. The business district began spreading as far south as 6th Street. Residential development shifted more to the south, in Farmer's and Goldman's additions, as well as in three newer subdivisions: Gage Addition (1909), Goodwin Homes (1919), and Park Tract (1924). During this time, the college was also expanding to the south and southwest. Development reached to the city limits at 13th Street. By 1940 the incorporated area of Tempe encompassed 1.9 square miles of land, but only one square mile -- the south half of Section 15 and the north half of Section 22 -- was developed, the rest being land north of the river, including 480 acres in Papago Park.

Tempe began as a predominantly Hispanic community, but in the early 20th century, Mexican American residents were becoming an increasingly segregated minority. Many of the oldest neighborhoods became overcrowded Latino barrios. The largest of these was Barrio Al Centro, located north of 8th Street and east of College Avenue. There was also La Primera, along West 1st Street, and La Cremería, or the Sotelo Addition, on East 8th Street, just outside of the city limits. Anglo and Hispanic residents were kept separated, not only in housing but in every aspect of community life. Shortly after the Tenth Street School was built, only Mexican American children attended classes in the old Eighth Street School. And at the public swimming pool at Tempe Beach Park, Mexican Americans were only allowed to swim one night a week. African Americans first came into central Arizona in the 1930s to pick cotton, but they were virtually excluded from living in Tempe by deed restrictions and intimidation. An African American community known as Okemah was located just outside of city limits, near 48th Street and Broadway Road

Williams Field was built in 1941 for the Army Air Corps Advanced Flying School. A few months later, the United States entered the Second World War. This isolated air field, several miles east of Chandler, became an important training facility for combat pilots. Soon large

numbers of people, as well as goods and supplies, were passing through Tempe. During the war, more military installations and a few manufacturing plants were built, and there were plenty of well-paying defense-related jobs available throughout the Valley. After two decades of economic hardship, Tempe's economy was suddenly booming.

Farmers also benefited from the wartime boom. Agricultural production had grown, and prices were high. Cotton was in great demand for use in military uniforms, rubber tires, and camouflage netting. Grapefruit and lettuce also became important crops. Tempe became a regional shipping center for large commercial citrus groves in the Kyrene District, just south of town.

People were working, and had money again, but there was nothing to spend it on. Automobiles and appliances were not manufactured during the war years, and most consumer goods were rationed or scarce. The demands of the war also brought severe restrictions on the building of new homes and businesses. The federal War Production Board limited the use of metal and building materials, effectively ending all new construction. Very few houses were built, and most authorized construction was for small additions and apartments. Unfortunately, this was a period when Tempe's population began growing at a remarkable rate, and there was a serious housing shortage. Several new subdivisions were platted during the war, but they remained undeveloped until the end of the war.

Before the war, Arizona State Teachers College President Grady Gammage had done a campus survey and found that most students had no intention of ever becoming teachers, but attended the Tempe school because it was the only college they could afford. Gammage vigorously lobbied the Legislature in an effort to bring ASTC up to full college status. In 1945, Governor Sidney Osborn signed a bill which created Arizona State College at Tempe, offering Bachelor's and Master's degrees in professional and technical fields. As men started returning home from the war, many chose to go to college. In 1946, enrollment at Arizona State College rose from 1,200 in the spring semester to 2,200 in the fall. Campus housing became so overcrowded that the college had to buy surplus trailers and barracks to provide rooms for students.

At the end of the war, servicemen returned home and new professors and students started arriving at Arizona State College. But many other people started coming to Tempe, too. Thousands of servicemen who were trained at bases in central Arizona during the war returned to live in the area. Also, many of the manufacturing companies that had come to the Valley during the war chose to stay. But there had been virtually no new housing built in the previous five years. Even after the war ended, building materials were still scarce. There was a clear need for lots of new homes, and there was plenty of cleared agricultural land that was available for development, but it would take more than a year before builders would be able to meet the demand for new houses in Tempe.

The history of Tempe during the post-World War II period, 1946-1960, is most characterized by very rapid population growth and an expanding economy. From 1940 to 1950, Tempe's population grew from 2,906 to 7,686, an increase of 235%. In the following decade, growth was even more pronounced. In 1960, the city's population reached 24,897, giving Tempe a rate of growth of 324 % through the 1950s. More than one hundred new subdivisions were opened for development, and with frequent annexations, Tempe's city boundaries were constantly expanding. These characteristic trends are clearly reflected in the thousands of houses and structures that were built during this time.

HISTORIC CONTEXT: RESIDENTIAL DEVELOPMENT IN TEMPE, 1946-1960

There was very little building activity in Tempe during World War II, but three new subdivisions were platted in early 1945. Building materials and permits were still nearly impossible to obtain, but people were eagerly anticipating the end of the war and were looking forward to returning to peacetime life. College View, University Park, and College Manor were located outside of city limits, at the southwestern, southern, and eastern edges of the city. The City Council recognized the urgent need for new housing in Tempe and immediately annexed all three tracts. College View and University Park were developed by E. W. Hudson and Kenneth Clark. Hudson, the agricultural scientist who developed Pima long-staple cotton, was a longtime cotton grower and cattle rancher. He wanted to sell off some of his vast land holdings in the area. Clark, a realtor and owner of Kenneth Clark Insurance Agency, handled the sale of lots. He had served a term on the City Council in the 1930s, and typically dealt with real estate in the downtown business district. College View was a small tract south of 13th Street and west of Mill Avenue. Dr. R. J. Stroud built the first home in the area, at Mill Avenue and 13th Street, in late 1944. Shortly thereafter, Hudson filed a subdivision plat and began sales of lots through Clark's agency. This subdivision of 18 lots extended Ash Avenue one block south to Hudson Lane. University Park was an 80-acre subdivision, roughly bound by Apache Boulevard, McAllister Avenue, the Southern Pacific Railroad tracks, and Mill Avenue. The Urban Development Company, headed by E. H. Shumway and Renz L. Jennings of Phoenix, began promotion of University Park, and Kenneth Clark served as the local sales agent. Deed restrictions required homes facing Mill Avenue or 13th Street to have at least 1,000 square feet of floor space, while other homes in the subdivision had to be built with at least 900 square feet. The College Manor Addition¹ was planned by Mrs. W. D. Moss and her sons in late 1944. This ten-acre subdivision was located east of Goldmans Addition, extending as far east as Rural Road, and consisted of 47 lots arranged around a circular street. An amended plat was filed on April 9, 1945, after the City Council encouraged the Mosses to adjust street widths and alignments. In October 1946, F. J. Robl built the first home in College Manor, a concrete block house costing \$6,500. Several other tracts were subdivided farther to the east. Jen Tilly Terrace, a rural development with large lots,

¹ All of the houses in College Manor were demolished or relocated in the 1960s due to the eastward expansion of Arizona State University.

was located about a quarter mile southeast of the city limits. Buena Park, Rancho El Dorado, Lola Vista, and Zella Vista were located more than a mile east of town, in Section 24.²

While there were many residential lots available in and around Tempe, actual construction of houses proceeded quite slowly. Wartime restrictions on building materials were relaxed in early 1945. In February, twenty new homes were under construction, but by August, a hundred families had purchased home sites, but could not build because there was still a shortage of lumber and other materials. There was little more than \$200,000 worth of new construction in 1945. Yet a local survey indicated that the postwar market for new houses in Tempe could be as high as \$1,000,000. Various local officials estimated that there would need to be an additional \$900,000 worth of construction of new buildings at Arizona State College, and \$500,000 for schools, churches, and public improvements. However, a year after the end of the war, a persistent shortage of building materials still hampered construction in Tempe. The federal government did what it could to recycle building materials from closed wartime facilities. Structures from the Papago Park POW Camp and the Rivers Japanese Relocation Center on the Gila River Indian Reservation were dismantled and offered to veterans. Herbert E. Turner moved two buildings from Rivers to 1220 South Roosevelt Street and turned them into a three-bedroom frame and stucco house. In 1946, the amount of construction rose to \$670,000, but it was still far short of meeting the demand for new houses.³

However, the scarcity of building materials was not the only problem; archaic home building practices also held back the pace of residential construction. Tempe was a small farming community. An agricultural depression in the 1920s and the Great Depression of the '30s had curtailed residential construction long before the war. Tempe's population grew by only 15% in the 1930s despite a modest expansion of Arizona State Teachers College. The city's stagnant growth was largely due to the lack of available financing -- Tempe banks did not offer home mortgages. This was a common problem throughout the country during the Depression. The Federal Housing Administration (FHA) was created in 1934 to reform lending practices and insure home mortgages, with the goal of boosting construction and creating jobs. This had an immediate impact on homebuilding in Arizona, as Valley National Bank began aggressively promoting home mortgages in Phoenix, Mesa, and other cities, but Tempe banks did not participate in FHA-insured loans until after World War II. Most people tended to save money or borrow it from family. They then bought a lot, built or supervised the construction of their home themselves, or hired a contractor to provide a finished house. This process was inherently slow, and certainly not geared toward production of housing on a large scale.⁴

² Maricopa County Recorder, Book 28 of Maps, Page 40, Book 30, Pages 4, 20, 37, 38, 40, Book 32, Page 45; *Tempe Daily News* (TDN), 30 Nov, 14, 15 Dec 1944, 21 Feb, 28, 3, 30 Mar 1945, 29 Oct 1946; Biographical files, BIO-Hudson, BIO-Clark, THM; Kenneth Clark, oral history interview, 6 Mar, 17 Jun 1993 (OH-132 and OH-134), THM.

³ TDN, 3 Feb, 22 May, 17 Aug 1945, 29 Jun 1946, 20 Aug, 28 Oct 1947.

⁴ Kenneth Clark oral history interview, 6 Mar, 17 Jun 1993; Grady Gammage, Jr, *Phoenix in Perspective: Reflections on Developing the Desert* (Tempe: Herberger Center for Design Excellence, Arizona State University, 1999), pp. 18-19; Clifford Edward Clark, Jr., *The American Family Home, 1800-1960* (Chapel Hill: University of North Carolina Press, 1986), p. 194; William S. Collins, *The New Deal in Arizona* (Phoenix: Arizona State Parks Board, 1999), p. 348.

The shortage of housing was not just a problem in Tempe; it was a serious national crisis. It was estimated that up to four million veterans could not find adequate housing. In 1946, President Truman created the office of Housing Expediter to recommend plans, programs, policy, and legislation for providing housing for veterans. Wilson W. Wyatt was appointed to the post, and immediately began promoting a national goal of building more than one million houses a year. Builders protested, saying that they could produce only 400,000 houses a year, but the restrictions and incentives that Wyatt proposed were incorporated into the Veterans' Emergency Housing Act, which provided \$600 million in subsidies to builders and suppliers who boosted production of low cost housing, with preference to builders of small homes with a maximum of 1,100 square feet of enclosed living space. When Republicans took control of Congress in the 1946 election, support for Wyatt's ambitious and controversial program waned, and he resigned. But by that time, builders were already starting to recognize the immense market for new homes, and ostensibly, Wyatt's goals were achieved -- there were one million housing starts in 1946, and an average of 1.5 million new houses each year through the 1950s.⁵

Perhaps the greatest impetus to the postwar housing boom was the widespread availability of secure financing made possible by federally-insured mortgages, which offered home buyers more advantageous terms than the high-interest short-term loans that had been typical. Amortized FHA loans could be obtained for up to 80% of the appraised value of a home, with payments spread over a period of up to twenty years. In addition, the Veterans Administration created a veterans mortgage guarantee program in 1944, also with terms up to twenty years. Since the government insured individual home mortgages made by private lenders, loans could be repaid slowly at interest rates of no more than 6%. However, the FHA set rigid standards for eligibility, which was deemed necessary to guarantee that houses do not decrease in value. A standard rating system was used to evaluate quality of construction and design, not just of the house a loan was being sought for, but also for the neighborhood in which it was located. Neighborhoods where houses were of varying sizes and styles, or that were racially integrated, were rated lower because these factors were believed to adversely affect property values, and hence, FHA's long-term liability. The Housing and Rent Act of 1947 liberalized financing under FHA, which encouraged more lenders to participate in the program. By the late 1940s, all builders started adhering to the FHA's design standards because a key selling point was that all homes in a subdivision were pre-approved for mortgage insurance. This encouraged large-scale production of virtually identical single family homes. The emerging federal housing policy to promote home ownership had a significant impact on housing construction and finance.⁶

⁵ Nathaniel S. Keith, *Politics and the Housing Crisis Since 1930* (New York: Universe Books, 1973), pp. 59-67; Mary K. Nenno, "Housing in the Decade of the 1940's - The War and the Postwar Periods Leave their Marks," in Gertrude Sipperly Fish (ed.), *The Story of Housing* (New York: MacMillan Publishing Co., 1979) p. 255; Esther McCoy, *Case Study Houses, 1945-1962* (Los Angeles: Hennessey & Ingalls, 1977), p. 13; J. Paul Mitchell, (ed.), *Federal Housing Policy and Programs; Past and Present* (New Brunswick, NJ: Center for Urban Policy Research, 1985), p. 9; TDN, 5 Feb, 7 Mar, 23 Apr, 10, 22, 27 Jun, 12 Dec 1946, 31 Jan 1947.

⁶ Clark, pp. 194, 197; Christine Hunter, *Ranches, Rowhouses, and Railroad Flats* (New York: W. W. Norton and Company, 1999), pp. 161-166; Gwendolyn Wright, *Building the Dream; A Social History of Housing in America* (New York: Pantheon Books, 1981), pp. 240-43; Collins, pp. 344-345, 362-363; Mitchell, p. 39; Nenno, p. 253; Keith, pp. 68-69.

The Roosevelt Addition was the first subdivision developed in Tempe according to the design standards for FHA loans. On March 18, 1946, J. J. McCreary filed a plat and requested that the subdivision of 22 lots along 3rd Street, west of Roosevelt Street, be annexed. William M. Blythe, a local contractor, was hired to start building frame and stucco houses at a cost of less than \$6,000 each. Blythe built a home for himself in the Roosevelt Addition. In August 1946, a Phoenix realtor, W. T. Helms, bought most of the remaining lots from McCreary and contracted with the Loftin Construction Company of Phoenix to build 16 two-bedroom cement block houses with steel sash, composition shingle roofing, and 850 square feet of floor space, at a cost of \$4,000 each. By fall of 1947, Helms was offering the two-bedroom homes for sale for \$7,750. According to the builder's advertising, among the most important features of the houses, were "FHA-Approved! GI Financing!"⁷

Goodwin Homes was also approved for FHA financing in 1947; however, several other subdivisions that were started in the late 1940s were not FHA-approved. Two other small subdivisions were platted in northwest Tempe, along West 5th Street. Vista Del Rio was developed by J. J. Brown, and the Orth Subdivision was developed by Ellwood H. Orth. In southwest Tempe, there were two new tracts west of Farmers Addition -- Val Verde, between 11th and 12th streets, and State College Homes, between 12th and 13th streets. Val Verde was developed by Kenneth Clark, and State College Homes, by Steve Flood. Kenneth Clark handled the sale of nearly all homes and lots in the new westside tracts.⁸

The first building activity on the north side of the Salt River started in the 1940s. Campo Alegre, a small enclave of thirteen large lots, was subdivided in 1940, and by 1946, a few large custom houses had been built. In 1947 Joe Weber began offering lots for sale in the North Tempe subdivision. The first 40-acre tract of this subdivision was along the east side of Scottsdale Road, between Curry and Weber roads; later units extended the subdivision east to Miller Road. Building restrictions required that homes have a minimum of 750 square feet and \$4,500 in valuation. Sales were handled by Sun Valley Realty Company.⁹

A lot of the residential development spread to the east, along the north side of U.S. Route 80 (Apache Boulevard). Palo Verde Park, just west of Rural Road, was developed by insurance agent H. S. Harelson and Tempe city manager E. W. Daley. J. A. Farnsworth began selling lots in Borden Homes, located west of McClintock Drive. The eastern portion of the tract, which was developed a few years later, was known as "Farnsworth Homes." Lot sizes were typically 60' x 130', and the average home built had three bedrooms and 1,130 square feet of floor space. Farnsworth kept 300 feet of frontage on the highway for future development of a shopping center. V. L. and Marguerite Wildermuth platted The Buena Park subdivision in Section 24, west of Price Road. The Victory Acres neighborhood was established even farther east, next to the Tempe Canal. In 1945, George Tibshraeny, a Lebanese immigrant, subdivided eighty acres

⁷ Maricopa County Recorder, Book 33 of Maps, Page 42; TDN, 14, 15 Feb, 25 Mar, 23 Aug 1946, 26 Jun, 12, 27 Sep 1947.

⁸ Maricopa County Recorder, Book 33 of Maps, Pages 40, 45, Book 36, Pages 7, 20, Book 37, Page 2, Book 38, Page 29, Book 40, Page 10, Book 45, Page 16; TDN, 16 Mar, 11 Oct, 13 Dec 1946, 12, 27 Sep 1947.

⁹ Maricopa County Recorder, Book 27 of Maps, Page 19, Book 38, Page 50; TDN, 28 Jun 1947.

of farmland and offered one-acre lots for sale. The long lots were good for raising "Victory Gardens" to help support the war effort. Most of the first settlers in the tract were returning Mexican American servicemen who built their own homes. A small community took shape in Victory Acres, which had St. Margaret's Catholic Church, two stores, and a saloon.¹⁰

Most of the homes built in Tempe and the surrounding subdivisions in the late 1940s were built one at a time by local contractors. Herman Goldman built two- and three-bedroom houses primarily in the University Park and State College Homes tracts. He used a variety of materials, including frame and stucco, brick, and pumice block. Goldman was credited with having taken out the most city building permits in the year 1947. W. W. Mitchell, Sr., a businessman, farmer, legislator, and publisher of the Mesa Free Press, moved to Tempe in 1945, and started building new homes in Goodwin Homes, Mitchell's Addition, and the Val Verde tracts. Howard W. Brooks came to Tempe 1927 and worked as construction superintendent at the Hotel Casa Loma, Westward Ho Hotel, Fox Theater, Orpheum Theater, and several schools. After the war, he also began building homes in Goodwin Homes, Mitchell's Addition, and the Val Verde tracts, both as an independent contractor and in partnership with Theo LeBaron as B & L Construction Company. Lloyd Williams, a well-known contractor in Tempe, joined with R. W. Montgomery and Warren W. Wells to form the firm of Montgomery, Williams and Wells, which did much of the construction in University Park and University Estates. Karl S. Guelich moved to Tempe from Rochester, New York, in 1946. He served briefly as a County Deputy building inspector, and built many of the houses in University Park and University Estates. Guelich established Tonto Homes, Inc., in 1951.¹¹

By the late 1940s, home building was becoming a much more efficient undertaking, due largely to the frequent partnerships that were formed between landowners and builders. Following a practice that was becoming common throughout the country, the horizontal developer filed the subdivision plat, installed streets and utilities, while the builder, or vertical developer, erected ten to twenty block houses at a time, all built to standardized specifications. Either the developer or the builder, or a third party realtor, handled all sales of houses in the tract. All homes were pre-approved for FHA mortgages. Because of this new coordinated approach, a subdivision could be laid out and its houses built and sold in less than a year.¹²

At this time, the development of Tempe tended to move toward the east, along State Highway 80 (Apache Boulevard). As there was already an established population center in Section 24, between McClintock Drive and the Tempe Canal, construction of new subdivisions brought infill development of the area east of McAllister Avenue, including Section 23, between Rural and McClintock.

¹⁰ Maricopa County Recorder, Book 31 of Maps, Page 6, Book 32, Page 45, Book 33, Page 38, Book 39, Page 14, Book 40, Page 3; TDN, 9 May 1947, 16 Feb 1950; Mark C. Vinson, "Cultural Continuity and Change in a Mexican American Vernacular Landscape" (Master's thesis, Arizona State University, 1991), pp. 29, 37-41.

¹¹ TDN, 29 Apr, 2 May, 22 Nov 1946, 2 Jun, 11 Jul, 20 Aug, 12 Sep, 19 Nov, 4 Dec 1947, 1 Jan, 27 Sep, 4 Nov 1948, 2, 7 Jan 1950, 26 Apr 1951, 21 Nov, 16 Dec 1953; Biographical files, BIO-Brooks, BIO-Mitchell, THM.

¹² TDN, various dates, 1947-1951; Gammage, pp. 16-18.

Palo Verde Park, developed by H. S. Harelson and E. W. Daley, included 52 lots along Pepper, Date, and Palm drives and Lemon Street, just west of Rural Road.¹³ In 1947, the Loftin Construction Company, which had just finished building homes in the Roosevelt Addition, started building 15 cement block homes in Palo Verde Park, with garages and tile roofs, at a cost of \$4,000 each. The homes were approved for FHA financing, and the first unit was completed in January 1948. Half of the lots were sold to private individuals who supervised their own construction. Construction of houses had been slow in College Manor, but in 1948, James R. Paul started building 25 houses in College Manor at a cost of \$5,000 each. Paul's own home was built in the subdivision, at 713 Orange Drive, and the office of the Paul Construction Company was at located at 725 Orange Drive. Burke Payne, president of the Phoenix Realty Board, and Kent Bentson, head of Bentson Contracting Company, began building homes and paving streets in the subdivision in 1950.¹⁴

C. A. Hudson began planning a new development east of Tempe in 1948. Hudson Manor was located south of Apache Boulevard and west of McClintock Drive. With financing from an insurance company, he planned to build 40 two- and three-bedroom houses that would sell for \$6,000 to \$7,000. Hudson would also pave streets in the subdivision. After Hudson Manor was annexed in February 1950, Realtor Conrad Carlson became the primary developer of Hudson Manor. He began with 28 two- and three-bedroom pumice block houses built by LaMar Homes. The office of his Carlson Realty Company was located nearby at 1601 E. Apache Boulevard. By 1954, when the third and fourth units of Hudson Manor were opened for sale, Darrow-Loftfield Construction Company was building all new homes in the subdivision. These houses were of masonry construction with 1-3/4 bathrooms. No down payment was required for veterans, and FHA financing was available. There were two model homes in the 1400 block of Hudson Drive. Tract 4, the westernmost portion of the subdivision included a site for a future park (Hudson Park).¹⁵

Plans for Tomlinson Estates were approved by the Tempe City Council on May 4, 1950, and the subdivision plat was filed one week later. The tract was located East of Dorsey Lane and north of Apache Boulevard. In July, Hugh Evans started building nine pumice block homes in the subdivision. In December, he took out building permits for 32 more homes, to be built at a cost of \$173,600. By this time, the Castleberry Construction Company had started building 25 pumice block houses and a small office-apartment unit on Hall and Lemon streets. Sales were handled by Sun Valley Realty Company.¹⁶

¹³ Like College Manor, all of the houses in Palo Verde Park were demolished or relocated in the 1960s due to the eastward expansion of Arizona State University.

¹⁴ Maricopa County Recorder, Book 39 of Maps, Page 14; TDN, 9 May, 12, 29 Sep 1947, 1 Mar, 21 Dec 1948, 31 May 1949, 13 Dec 1950, 27 Jan 1951.

¹⁵ Maricopa County Recorder, Book 44 of Maps, Page 43, Book 46, Page 47, Book 52, Page 12, Book 60, Page 25; TDN, 15 Oct 1948, 1, 7 Mar, 21 Apr, 17 Jun 1950, 10 Apr, 30 Sep 1954.

¹⁶ Maricopa County Recorder, Book 47 of Maps, Page 36; TDN, 4 May, 18 Jul, 30 Nov, 27 Dec 1950.

Shortly after World War II, the City began planning improvements of public utilities to accommodate the coming growth. Water mains were extended to Rural Road and a new city well was drilled at College Avenue and the Southern Pacific Railroad tracks. The City Council approved a \$100,000 expansion of the city's sewer system in 1946. It included the laying of 32,150 feet of mains to the new subdivisions and a disposal plant near the river between Farmer and Roosevelt. The city's water and sewer systems were again expanded in 1948, after a \$230,000 bond issue was approved by a 3 to 1 ratio. Work included replacing the city's existing 250,000-gallon reservoir up on Tempe Butte with a 1 million-gallon water tank. The reservoir construction included a road, retaining wall, and laying of 12-inch pipe. Another city well was drilled in Hudson Manor.¹⁷

As demand for city services grew, the municipal boundaries began expanding to incorporate new neighborhoods as they were built. Landowners in subdivisions outside of city limits often requested annexation so they could connect to city water and sewer lines, and eventually get residential irrigation and paved roads. But some resisted incorporation because it would bring a sharp increase in their taxes. In 1948, the City Council considered annexing an area from two blocks north of U.S. Highway 80 (Apache Boulevard) to the Southern Pacific Railroad tracks on the south, and east as far as the Tempe Canal. Developed tracts in the area included Lola Vista, Zella Vista, Buena Park, Rancho El Dorado, Borden Homes, Hudson Manor No. 1, and Jen Tilly Terrace. However, owners in Borden Homes, Hudson Manor, and portions of Section 24, protested, and some residents of the eastern subdivisions even considered forming their own town. It was determined that without the cooperation of owners in Section 23, Section 24 could not be annexed because it was not contiguous to the city. Instead, the Council approved annexation of smaller parcels in 1949 and 1950, including University Estates and Jen Tilly Terrace. The City Council had considered annexing Section 16, the area north of 8th Street (University Drive) and west to Priest Drive, but abandoned the effort because the State Land Department owned and controlled most of the land. On March 17, 1950, the City Council approved its largest annexation, extending the city boundary east to McClintock and south to the railroad right of way. The pre-World War II boundaries of Tempe had encompassed an area of 1.9 square miles; by 1951, the incorporated area was 2.8 square miles, and would continue to grow through the 1950s. In mid-1953, there were about 200 homes in various stages of construction within the city boundaries, and another 200 houses being built in areas adjacent to the city, with builders and owners anxiously awaiting annexation.¹⁸

Residents of new subdivisions began petitioning the City Council, asking for construction of neighborhood irrigation systems. The Council approved formation of Improvement District No. 36, the first of several special districts where property owners were assessed for the cost of improvements. Improvement District No. 36 brought the development of a \$31,000 underground irrigation system in University Park and portions of College View. Subsequent districts provided irrigation in Roosevelt Addition, Vista Del Rio, Hudson Manor, Borden Homes, and Tomlinson

¹⁷ TDN, 9 Mar, 20 Sep 1945, 29 Mar, 27 Jul, 1 Aug 1946, 11 Feb, 5 May, 11 Jun 1947, 10 Sep, 21, 23 Oct 1948, 21 Jul, 11 Oct 1949, 4 Jan, 3 May, 7 Jun 1950.

¹⁸ TDN, 21, 23 Feb 1948, 12 Aug 1949, 3 Jan, 2 Feb, 1, 18, 25, 28 Mar, 5 Apr 1950, 10 Jul, 6 Oct, 3 Nov 1953.

Estates. Another service soon demanded by residents was street paving. In September 1951, residents of University Park petitioned the City Council to pave the streets of the subdivision. In mid-1952, a paving district was formed, covering College Avenue and 14th and 15th Streets, with property owners paying assessments for the improvements. Within a year, residents of Palo Verde Park, Jen Tilly Terrace, College Manor, Goodwin Homes, Val Verde Tract, and State College Homes also requested street paving, bringing \$200,000 worth of additional street improvements. In 1953, Improvement District No. 44 was formed to provide paved streets, curbs, sidewalks, drainage, and an underground irrigation system for 80 acres in southwest part of city. It cost owners an average of \$250 per lot for irrigation service and about \$8 per front foot for street paving.¹⁹

In December 1952, Del E. Webb announced plans to build 167 homes in his new Campus Homes subdivision at the southwest corner of Tempe. Webb was a well known contractor who had built many large government projects, including Luke Field, Williams Field, and the Rivers Japanese Relocation Center on the Gila River Indian Reservation, and there was much excitement about the planned development. However, the Del E. Webb Construction Company got off to a bad start when it found itself battling the city over water sales rights. Webb had obtained a certificate of necessity to serve domestic water not only to Campus Homes but other subdivisions, including the Tempe High School site. But city officials claimed that Webb never filed a request for city water service. Del Webb offered to settle the matter with the city, getting out of the water business and getting on with building homes. Webb had put together a carefully crafted plan to build and sell Campus Homes, a tract of 160 masonry homes in two-, three-, and four-bedroom models. With six floorplans and 23 exterior elevations from which to choose, the builder offered buyers the opportunity to design their own individually customized home. Yet, at the same time, the company followed a remarkably consistent standard -- all houses were of pumice block construction, built at a cost of \$7600 each. The subdivision had city water, sewer, and irrigation, paved streets and curbs, and was approved for FHA financing. James P. Paul, the primary builder in College Manor, was chosen to manage the project, and Norman F. McKinley, a local contractor, became construction superintendent. When Campus Homes opened on June 28, 1953, more than 10,000 people came to see the six model homes on West 13th Street near Wilson. On the first day, 33 houses were sold. When construction of first 50 houses began in August, nearly half of the homes to be built had already been sold. The first deliveries of Campus Homes began in January 1954, with eight to ten new homes being completed each week. Del Webb was the first of the emerging modern homebuilder-developers that were active in Tempe in the 1950s. It would become increasingly common for one company to subdivide property, build houses, and sell the finished products to home buyers. Though they generally did not produce tracts as large as Campus Homes, local contractors continued to dominate homebuilding in Tempe for several more years.²⁰

¹⁹ TDN, 10 Jan 1947, 21 Apr, 10 Jun 1948, 9 Dec 1949, 14 Feb, 8, 26, 29 Sep, 4 Oct 1951, 20 Jun, 4 Nov 1952, 9 Jan, 19 Feb, 10 Apr, 13 May, 17 Jul, 5 Aug, 11 Sep, 3 Dec 1953.

²⁰ Maricopa County Recorder, Book 55 of Maps, Page 32; TDN, 3 Dec 1952, 23, 26 Jan, 4, 5, 11, 12 Feb, 10 Apr, 27, 29 Jun, 25 Jul, 6 Aug, 18, 21, 30 Sep 1953, 18 Jan 1954.

By the early 1950s, patterns of subdivision development were increasingly segregating Tempe residents by income level. The rapidly growing southwest portion of town, south of 8th Street (University Drive) and west of Farmer Avenue, was filled with middle class residential neighborhoods. To the south of Arizona State College were Tempe's more affluent neighborhoods, with large homes on large irrigated lots. Subdivisions with smaller inexpensive houses were mostly located to the northwest (west of downtown) and east, along Apache Boulevard.

W. W. Mitchell was developer of Mitchell's Subdivisions, a series of small tracts laid out around Mitchell Elementary School, which served the neighborhoods of southwest Tempe. Mitchell, as well as several other local builders built the homes in the neighborhood. Tempe Terrace was laid out west of Val Verde and State College Homes. In December 1950, Sahuaro Construction Company began building ten pumice block houses on Howe Street, at costs ranging from \$4,300 to \$5,400 each. In March 1951, Farmer & Godfrey started building 30 two-bedroom pumice block houses on 12th Street at a cost of \$4,200 each. Harl Chamberlain began development of the second unit of Tempe Terrace in 1956.²¹

To the south, three new subdivisions were located around a site for a proposed new park (Daley Park). University Estates was the first subdivision to extend residential development as far south as Broadway Road. In February 1950, Universal Homes announced that it would build 95 new homes in the tract. Several other homes were being privately built in University Estates. The first five homes built were two- and three-bedroom homes that sold for \$5,950 to \$6,650. They were built of red brick or block, with tile trim and redwood beams, and were sold exclusively by Universal Realty Company. By July 1950, 25 homes were built or under construction. In 1951, Karl S. Guelich, president of Tonto Homes, Inc., began building pumice block houses on Broadway Lane at a cost of \$7,500 each. University Terrace, a small tract of large custom homes, was developed by James E. Shelley and E. W. Hudson in the early 1950s. Guelich developed University Heights and began building houses in the subdivision in 1955. The custom homes were designed by architect T. S. Montgomery, featuring central air conditioning and wall-to-wall carpeting, and sold for \$12,000 to \$15,000.²²

In 1954, P. L. Agnew began turning the Valsunda Date Gardens, a 40-acre tract near Mill and Broadway, just south of the new Tempe High School, into a more exclusive development with larger more expensive homes. The Agnew Construction Company offered custom homes, each with its own individual design rather than a typical tract style. Many of the homes were built with central air conditioning and a swimming pool, and were often twice the price of homes in other subdivisions. Some lots were sold to individuals who wanted to build their own house, but they were required to build a home with a minimum of 1,200 square feet. Date Palm Manor

²¹ Maricopa County Recorder, Book 35 of Maps, Page 13, Book 48, Page 3, Book 50, Page 44, Book 65, Page 9; TDN, 1, 5 Dec 1950, 8 Mar 1951, 17 Jan, 6 Aug 1956.

²² Maricopa County Recorder, Book 46 of Maps, Page 5, Book 49, Pages 9, 45, Book 57, Page 19; TDN, 7, 15 Feb, 20 Jul, 30 Nov 1950, 23 Mar, 26 Apr 1951, 28 Jan 1955, 2 Jan, 11, 16 Aug 1956.

opened in July. Sales were through Joe Williams and Robert T. Ashley at the Tempe Realty Company.²³

Lee Thompson Real Estate of Phoenix and the Carl Willard Construction Company developed Willacker Homes in the northwest part of town. Model homes were located at 5th Street and Robert Road. All houses were three-bedroom pumice block houses with ceramic tile in the kitchen and bathroom, open beam ceilings, and 912 square feet of floor space which sold for \$6,500. The down payment of \$595 included three years of insurance.²⁴

As neighborhoods grew, new churches were built in the subdivisions. The Seventh-Day Adventist Church was built in University Park, and the Community Christian Church was built in University Terrace. Local builders and developers often sat on church construction committees.²⁵

While many new homes were being built in the mid 1950s, some older houses were being demolished. As the downtown business district expanded to the south, dozens of houses on Mill Avenue between 6th and 10th streets were razed for construction of new stores and office buildings. During this time, East Tempe, or Barrio Al Centro, the oldest neighborhood in Tempe, was condemned and all of the land was acquired by Arizona State College for expansion of the campus. The area encompassed about 100 acres on the north side of 8th Street, between College Avenue and Rural Road. Nearly all the residents of the barrio were Mexican American families, and many were descendants of Tempe pioneers. They vigorously resisted the destruction of their neighborhood, but ultimately they moved, and many bought houses in the new neighborhoods that were being built. The demolition of Barrio Al Centro effectively ended segregated housing in Tempe.²⁶

The steady expansion of the city required the constant upgrading of public utilities, and the City Council and Tempe residents generally supported all proposed public improvements. In 1958, Tempe voters approved an \$890,000 bond issue for improvements to the water and sewer systems, including the addition of a 2 million-gallon water tank on the butte. The number of municipal construction projects grew with each annexation or new subdivision, so in 1957, a director of public works was appointed in 1957 to assist the city manager. In another bond election held on November 10, 1958, voters approved \$65,000 to build a fire station and \$50,000 for parks and recreation, including funds to build a nine-hole golf course in Papago Park, but

²³ Maricopa County Recorder, Book 58 of Maps, Page 18, Book 59, Page 8; TDN, 15 Jan, 3 Apr, 23 Jul 1954.

²⁴ Maricopa County Recorder, Book 49 of Maps, Page 18; TDN, 27 Aug 1953.

²⁵ TDN, 4 Dec 1947, 7 Jan 1948, 12 Jan, 7 Dec 1949, 23 Mar, 26 Sep 1951; Tempe History file, TH-510 (Churches), THM.

²⁶ Sanborn Fire Insurance Company, Tempe, 1945; TDN, various dates, 1950-1955; Dahlia Moraga Bennett, oral history interview, 25 Mar 1992 (OH-123), Clara Urbano, oral history interview, 28 Mar 1992 (OH-125), Josie Ortega Sanchez, oral history interview, 23 Jun 1992 (OH-126), Irene Gomez Hormell, oral history interview, 13 Feb 1993 (OH-130), Oral History collections, THM; Tempe History file, TH-581 (Mexican American), THM.

they rejected an \$85,000 bond for street improvements on Broadway Road. The new fire station led to creation of the first regular city fire department. Other city facilities included two parks, Tempe Beach Park and Daley Park, and the city owned three other park sites which had not yet been developed. Improvement District No. 45, the tenth special district created in Tempe since end of World War II, was formed to build an underground irrigation system for Broadmor Manor, University Terrace and Daley Park.²⁷

In 1958, the City Council approved Ordinance No. 281, which annexed areas on the east and west, extending the city's boundaries to Price Road and 48th Street. This doubled the size of Tempe to five square miles, placing city boundaries adjacent to Phoenix and Scottsdale, and within three miles of Mesa. With the incorporation of existing neighborhoods, the city's population was boosted by a third, to a total population of 16,000.²⁸

Apartments and other types of rental units were built at a much slower pace than single family homes. In the late 1940s, it appears that apartment buildings were only built on Mill Avenue, in the downtown area. Structures built specifically as multi-family rental properties were rare within the new subdivisions. This was due in part to strong opposition from homeowners and developers. In June 1948, R. E. Heffner requested a change in zoning for eight University Park lots from Residence A to Residence B so that he could build apartments. Residents of the subdivision protested, and the request was initially rejected, but the Council eventually approved rezoning of the University Park property in February 1950. In the late 1940s and early 1950s, the most common types of rental properties were duplexes and small apartment buildings with up to four units. Most of these tended to be located just east of the ASC campus, in the Goldman Addition, College Manor, and Palo Verde Park, and on South College Avenue, Rural Road, and Apache Boulevard. There were just a few larger multi-family housing properties. Dallas P. Richeson built a 24-unit apartment complex in Palo Verde Park, at 1002 & 1010 South Rural Road, in 1951. It consisted of one-story Ranch Style pumice block buildings with four to eight units in each building, built at a total cost of \$60,000. In the following year, Hummel and Killough built a 36-unit apartment complex on Transvaal, between Tyler and Kruger streets, near Ritter School. The two block buildings, each measuring 40' x 162', were built on a 350' x 150' site at a cost of \$60,000. There were also a few trailer parks in the eastern part of the city, such as the 36-unit park on a 288' x 430' site at 1856 East Apache Boulevard.²⁹

By 1958, larger apartment complexes were becoming more common in Tempe. Harold E. Hirsch, the owner of several small duplexes and apartment buildings, started building a two-story apartment building at 821-831 Transvaal Street, near Ritter School. The masonry structure with 14 units cost \$84,000. Robert T. Cox and Emerson Scholer requested a change in zoning from R-1 to R-3 so that they could build apartments on West 8th Street (University Drive), between Roosevelt and Hardy streets. The Gottlieb Investment Company contracted with H & J

²⁷ TDN, 26 Sep, 11, 18 Nov 1958; Ross R. Rice, "Tempe: The Aches and Pains of a Growing College Town," *Western City*, Aug 1957, pp. 38-39.

²⁸ TDN, 11 Apr 1958, Rice, p. 38.

²⁹ TDN, 26 Mar, 10 Oct 1946, 24 Jun 1948, 15, 16 Feb, 31 Oct, 10 Nov, 21 Dec 1950, 4 Jan, 21 Nov 1952, 28 May 1953, and various dates, 1946-1950.

Construction Company of Phoenix to build 40 one- and two-bedroom apartments on the northwest corner of Roosevelt and Broadway. The five-acre site included four swimming pools. A number of large apartment complexes were built in Sunset Vista, a subdivision at Rural and Broadway, by some of Tempe's most active builders, such as Hennessy & Black and Harl R. Chamberlain.³⁰

In 1958, Conrad E. Carlson, owner of the Carlson Realty Company, joined with William H. Shafer, president of Siesta Homes, Inc., to develop several popular subdivisions. In April 1958, they began building the first of 60 houses in Carlson Park around East Don Carlos Drive, just three blocks north of the A. J. Bayless Shopping Center. All were three-bedroom, two-bathroom masonry homes, built at a cost of \$9,500 each. There was only one model home opened. Within two months, 50 homes were under construction and the project was sold out. Carlson and Shafer continued to work together, developing Hudson Park in June 1958. The tract consisted of 45 lots between Howe Avenue and Orange Street, east of Thew School. Following the same model that they used in Carlson Park, they again adopted a standardized construction plan to build three-bedroom, two-bathroom masonry houses with a family room that sold for \$10,750. The subdivision had paved streets, sidewalks, and city sewer. By July, 22 new homes were under construction and one-third of the homes were sold. Carlson Realty Company and Siesta Homes also developed Parkside Manor, at Hardy Drive and Broadway Road, in late 1958, where masonry homes were built at a cost of \$9,300 each.³¹

By late 1950s residential development spread as far west as Priest Drive, and beyond Priest in the area north of University Drive. The Laird Estates subdivision was developed by Tempe mayor Hugh Laird, and his brother and sister, William E. Laird and Minnie Laird Raymond, in 1955. Williams and Wells, Marion Weary, and K & W Construction Company built most of the homes in the subdivision. Norman F. McKinley was the developer and builder of University Homes. The Bruce Realty Company handled sales of McKinley's new homes, which sold for \$10,000 to \$12,000. John E. Wiley of the Wiley Realty Company subdivided Western Village, an 80-acre tract with 360 lots. Richards Construction Company of Phoenix developed the first 20 acres, which included 75 lots on the south end extending to 13th Street; in 1958, K & W Construction Company started building homes on the remaining lots in the subdivision that sold for \$9,250 to \$12,000. Westgate was developed by Karl S. Guelich, with homes built by Williams and Wells which sold for \$12,200 to \$12,750.³²

Lindon Park, a subdivision northwest of Priest and University drives, was started in 1958. Phillip Savittieri and Sons, general contractors, had been building homes in the Valley for ten years under the name P & S Construction Company. In summer of 1958, they began building homes in the first 40-acre parcel of what would be a 150-acre tract in west Tempe. On

³⁰ TDN, 22 Jan, 5 Jun, 23 Jul, 8 Aug, 7 Nov 1958.

³¹ Maricopa County Recorder, Book 76 of Maps, Page 42, Book 77, Page 40, Book 78, Page 50; TDN, 19, 24 Apr, 3, 7 Jun, 10, 21 Jul, 8 Sep, 11 Oct, 6 Dec 1958.

³² Maricopa County Recorder, Book 65 of Maps, Pages 23, 30, Book 70, Page 49, Book 71, Page 12, Book 78, Page 43, Book 79, Page 25, Book 85, Page 41, Book 88, Page 33; TDN, 20, 23 Jan, 15 Apr, 22 Dec 1955, 11, 12, 13 Jan, 6, 11 Aug 1956, 27 Sep 1958, 7 Apr, 8 May, 6 Nov 1959.

December 28, 1958, they opened four model homes -- the Plaza, the Whitney, the Maplewood, and the Mayfair. The masonry "Paramount Homes" had three bedrooms, 1-3/4 baths, and a family room, and sold for \$8,000. Sales were handled exclusively by Paramount Realty and Insurance.³³

D Bar L Ranchos, a 36-acres subdivision northeast of Priest and University drives, opened in July 1958. It featured houses built by Darrow-Loftfield Construction Company, builder of most of Hudson Manor. The tract included amenities such as paved streets, curbs, and driveways, sewers and city utilities, and central heating and cooling. Sales were by Lyal-Moore, Tempe. A variety of models were offered, including two-bedroom houses for less than \$9,000, three-bedroom houses with a family room for \$9,750-\$10,950, and four-bedroom houses for \$11,700. The more expensive models included a double carport. The cost of construction was about \$350 below the sale price.³⁴

Margo Manor was initially developed by Siesta Homes, Inc., which began building houses in 1959. Model homes were at 8th Street (University Drive) and Priest Drive. The Darrow-Loftfield Construction Company also built some houses in the subdivision, including four model homes on a cul-de-sac on 9th Street.³⁵

The Housing Act of 1954 lowered the amount of down payment required for houses costing up to \$25,000, and the Emergency Housing Act of 1958 and Housing Act of 1959 also expanded FHA and VA loans for single family homes. This made it possible to obtain federally-insured mortgages for larger houses. Following the trend in development that had been established since 1950, the largest and most expensive homes were built in neighborhoods to the south. Two of the most active homebuilders in Tempe, Herman Goldman and Karl S. Guelich, established new subdivisions south of Broadway Road in the late 1950s. Goldman built the first home in Broadmor Manor in 1955. His large Ranch Style homes were lavishly decorated with ornate wood trim, siding and shutters, wood shingle roofs, diamond-paned casement windows, and decorative brickwork. The brick or block masonry houses typically had 1,500 square feet, with three bedrooms, 1-3/4 bathrooms, attached carport and storage room, and arcadia doors opening to the back yard. They sold for \$15,000 to \$20,000. Guelich developed of the former Bishop Ranch, located south of Broadway near Rural Road, for the University Investment Company. In 1956, he opened Broadmor Estates, a 35-acre tract where houses sold for about \$15,000; two years later, he began developing the 18-acre Broadmor Vista subdivision, which featured sprawling Ranch and International Style "Sun Devil Homes" which sold for \$12,000 to \$15,000.³⁶

³³ Maricopa County Recorder, Book 78 of Maps, Page 22; TDN, 3 Jun, 7 Oct, 27 Dec 1958, 10, 14 Jan 1959.

³⁴ Maricopa County Recorder, Book 76 of Maps, Page 18; TDN, 19 Apr, 25 Jul, 20 Aug 1958.

³⁵ Maricopa County Recorder, Book 85 of Maps, Page 36; TDN, 6 Nov, 18 Dec 1959, 25 Jun 1960.

³⁶ Keith, pp. 126-127, 133; Christopher T. Martin, "Tract-House Modern: A Study of Housing Design and Consumption in the Washington Suburbs, 1946-1960" (Ph.D. dissertation, George Washington University, 2000), pp. 38-39, 59; Albert M. Cole, "Federal Housing Programs, 1950-1960," in Fish, *The Story of Housing*, pp. 326-328; Maricopa County Recorder, Book 62 of Maps, Pages 11, 16, 30, Book 68, Page 3, Book 70, Pages 19, 30, Book 71,

The Tempe Estates subdivision was also established just south of Broadway Road by Elmer Bradley, Clyde Gililand, and C. I. Waggoner in 1959. Gililand and Waggoner were prominent community leaders, and Bradley would later serve as Mayor of Tempe. The Bradley Construction Company built most of the large custom homes in the tract.³⁷

Phoenix contractor Frank E. Knoell bought 20 acres south of Broadway Road and east of Rural Road from Mrs. T. J. Hughes in 1959. The Knoell Brothers Construction Company began construction of three- and four-bedroom masonry houses with family rooms and central air conditioning. All homes in the subdivision were built with a one- or two-car garage. Four model homes were completed in July 1959. Sale of the homes, which sold for \$11,000 to \$14,000, was handled by Tom Cavanagh Realty. After quick sales of their homes in the Hughes Acres tract, Knoell began developing a much larger subdivision between Alameda Drive and Southern Avenue, on both sides of Mill Avenue. In 1960, the company began building masonry houses with three or four bedrooms, two baths, a family room, and central air conditioning. All homes in Nu-Vista were built with a garage, and had a gas light in front. The innovative use of cul-de-sacs throughout the subdivision plan created small secluded neighborhoods with little through traffic. There were twelve different models, which sold for \$12,900 to \$15,750.³⁸

The late 1950s brought a rapid construction boom in the northernmost part of the city, north of the Salt River. In 1959, Ralph Staggs, president of Staggs-Bilt Homes, began planning a 200-acre development in north Tempe and south Scottsdale. Papago Parkway would have 1,000 homes, and cost \$13 million to build. The 60-acre portion of the development that is south of Continental Drive is located in Tempe. Construction began in July, and nearly 100 new homes were started each month. Model homes were opened in September 1959, with three-bedroom masonry houses selling for \$11,000 to \$14,000. Gene Hancock, president of Hancock Construction Company and Cavalier Homes, started building homes on an 84-acre parcel between Weber Drive and McKellips Road in November 1959. Cavalier Hills was a \$15 million construction project. It featured "all electric" Cavalier Homes with a Goettl heat pump, which sold for \$14,550 or more. In March 1960, more than 15,000 people came to the opening of Cavalier Hills.³⁹

In the late 1950s, all new low-cost housing was built to the east, in Sections 23 and 24. The B & H Construction Company built houses on all ten lots in the B-H Homes subdivision in 1958 at a cost of \$4,800 each. Transmission Terrace was developed by Harl Chamberlain; he built three-bedroom, one-bath houses, with paved streets and sidewalks, that sold for \$8,250. Various builders apparently erected small Ranch Style houses in Lee Park through the 1950s. The subdivision includes Thew Elementary School, which serves the surrounding east Tempe area,

Pages 9, 38, Book 77, Page 22, Book 81, Page 21, Book 84, Page 44, Book 94, Page 21, Book 97, Page 31; TDN, 20 May 1955, 11, 13, 30 Jan, 16 Aug 1956, 6 Feb 1958, 8 Jan, 8 May 1959, 25 Jun 1960.

³⁷ Maricopa County Recorder, Book 70 of Maps, Page 23; TDN, 20 Feb 1959.

³⁸ TDN, 23 Feb, 6 May, 5, 31 Jul, 25 Aug 1959, 22, 25 Jun 1960.

³⁹ Maricopa County Recorder, Book 82 of Maps, Page 33, Book 84, Page 16, Book 85, Page 22; TDN, 9 Jul 1958, 28 Jul, 12, 28 Aug, 14 Sep, 29 Nov 1959, 7 Mar, 25 Jun 1960.

and Calvary Baptist Church, which was built as a permanent home for the congregation of the Buena Park Baptist Mission. Chamberlain built the River Drive Church of Christ in Transmission Terrace.⁴⁰

By 1960, subdivisions were started by new Phoenix homebuilders that would come to dominate the homebuilding market in Tempe in the 1960s. The E. L. Farmer Construction Company began development of the Marilyn Ann subdivision in 1960, building homes with three bedrooms, two baths, and a family room. The Ellis Suggs Construction Company started building the first 14 houses in Polley Ann in August 1960.⁴¹

Tempe began a vigorous annexation campaign in 1960, incorporating Victory Acres, located between Price Road and the Tempe Canal, and a broad swath of undeveloped land extending down to Baseline Road. A proposed annexation of land to the west brought the City in conflict with Phoenix. Tempe wanted to incorporate all land within the Tempe School District No. 3 boundaries, which extended to 40th Street. However, both Tempe and Phoenix were circulating petitions in the disputed area, between 40th and 48th streets, and the Tempe City Council instead chose to fix the City's boundary at 48th Street. By the end of the year, the size of Tempe had increased to eleven square miles. The newly incorporated areas added more than 3,000 people to the city, and included Tempe Heights, an isolated subdivision near 48th Street and Baseline Road that had been developed in the late 1950s.⁴²

During the post-World War II period, 1946-1960, more than 3,200 acres of new residential subdivisions were developed, extending neighborhoods as far south as Southern Avenue. In examining the history of this residential development, it is impossible to consider the historical significance or architecture of individual houses. By definition, the postwar suburban subdivision and all of its homes share the same set of attributes. Construction in a subdivision was typically controlled by single builder with a standardized stylistic approach. Indeed, the ubiquitous FHA building and planning standards required that each home be inseparable from its neighborhood.

⁴⁰ Maricopa County Recorder, Book 50 of Maps, Page 15, Book 72, Page 37, Book 76, Page 2; TDN, 3 Mar, 3 Jun, 21 Jul 1958; Tempe History file, TH-510 (Churches), THM.

⁴¹ Maricopa County Recorder, Book 84 of Maps, Page 43, Book 88, Page 47; TDN, 23 Jan, 25 Jun, 4 Aug 1960; Memorandum, Joe Nucci to Mark Vinson, 9 Jul 1999.

⁴² TDN, 16 Jan, 16, 17 Mar, 12 May 1960; Maricopa County Recorder, Book 64 of Maps, Page 35, Book 87, Page 7; Tempe Building Permits, THM.

HISTORIC CONTEXT: COMMERCIAL DEVELOPMENT IN TEMPE, 1946-1960

At the end of World War II, Tempe had a small but thriving downtown business district along Mill Avenue, between 1st and 6th streets. Nearly all Tempe businesses were concentrated in this area. Some, such as Laird and Dines Drugstore, Tempe Hardware Company, and the Vienna Bakery, had been in business for more than forty years. As the rapid development of new subdivisions brought more people to Tempe, many new businesses opened to serve them. In the late 1940s, the downtown commercial district started expanding down to 8th Street (University Drive). By the early 1950s, commercial growth started moving farther to the south and to the east, where the population of the city was growing.⁴³

In the late 1940s, most new commercial construction was on the west side of Mill, between 6th and 8th streets. Chester A. Smith built the Tempe Ice & Fuel Company (612 Mill Avenue), a large complex with several small stores. The Sprouse-Reitz Company built a 7,000-square foot store with a red tile front at 618 Mill. Kenneth Clark, a realtor and subdivision developer, built a commercial building and an office building. At least ten new business buildings were built on Mill Avenue by 1950. Commercial development also spread along East 8th Street (University Drive), consisting mostly of stores and restaurants that catered to college students, and a few small medical buildings. Daley's Trading Post, at 13th Street and Rural Road, is the only new store known to have been built on the east side of town, where many new subdivisions were located.⁴⁴

During World War II, Americans learned to live with rationing and chronic shortages of food and other commodities, but after the war, as the peacetime economy soared, food and consumer goods were available in great abundance and variety. Grocers began adapting to the new economy by expanding their stores. Stocking nationally distributed brand name products and a greater variety of frozen, processed and packaged foods required more space. Most groceries built additions or moved into larger buildings. Safeway opened the first supermarket in Tempe in 1951. The company built a block masonry store with steel truss roof on the northeast corner of 5th Street and Myrtle at a cost of \$125,000. With 17,500 square feet, it was four times as big as old store on Mill Avenue.⁴⁵

Banks remodeled, expanded, and added drive-through windows to serve the growing population, but only one new bank building was erected in the 1950s. The First State Bank of Mesa,

⁴³ Tempe Business Survey, THM.

⁴⁴ TDN, 6 Feb, 31 Aug 1946, 19 Mar, 23 Apr, 25 Jun, 2 Sep, 20 Dec 1947, 2 Oct, 4 Dec 1948, 24 Feb, 20, 21 Jun, 16 Aug 1949, 10 Feb, 16 Mar, 21, 23 Jun 1950, 29 Jan 1951, 28 Oct, 13 Dec 1952, 17 Jan 1953, 18 Jun, 15 Sep 1955; Tempe Business Survey, THM.

⁴⁵ TDN, 14 Jun, 6 Jul, 5 Aug, 9 Sep 1950, 11, 17 Jan, 7 Jul 1951; Tempe Business Survey, THM; Chester H. Liebs, *Main Street to Miracle Mile; American Roadside Architecture* (Boston: Little, Brown and Company, 1985), pp. 128-132.

designed by Scottsdale architect Hiram Benedict, was built at 619 Mill Avenue in 1954. This International style building was built of pumice block with terrazzo tile; it had 3,440 square feet of floor space, with a drive-through window and a paved parking lot fronting on Mill Avenue.⁴⁶

RETAIL STORES IN TEMPE

	1939	1948	1954
Food	13	17	22
General Merchandise	1	2	3
Apparel	3	6	10
Furniture	3	8	7
Auto Dealers	3	4	14

Source: "Economic Survey of Eastern Maricopa County," Bureau of Business Services, ASC, (1955), p. 168.

As the data in the preceding table indicates, all types of retail stores steadily increased in number after the war, but this growth was not in proportion to the massive residential construction that brought thousands of new residents to the city. This changed dramatically in 1955, with the construction of Tempe's first two shopping centers, the A. J. Bayless Shopping Center and Tempe Center.

In 1950, A. J. Bayless Markets bought the entire 1500 block of frontage on the north side of the Tempe-Mesa Highway (Apache Boulevard) near the Tomlinson Estates subdivision, but it was not until 1955 that the company announced plans to build a supermarket on the site. In early 1955, Homes and Sons, Phoenix contractors, began construction of the 302' x 136' block masonry building, which would include the 25,000-square foot A. J. Bayless Market and 19,500 square feet of additional commercial space divided into stores of various sizes. The building was set back 136 feet from the highway to provide 10,000 square feet of parking. The shopping center cost \$250,000 to build. The formal opening of A. J. Bayless Market and Shopping Center was in April 1956. In addition to the shopping at the A. J. Bayless Market, customers could stop at the M&H Variety Store, Pioneer Camera Shop, Phebe's Dress Shop, E. L. Warner's Apache Liquor Store, Tri-City Drug Store, Don Urquhart Barber Shop, Rosamond's Beauty Shop, or Dick Frank's Laundromat. Other free-standing businesses were later built on both sides of the shopping center.⁴⁷

In early 1955, the O'Malley Investment Company announced that Los Angeles architect Victor Gruen, the leading designer of modern shopping centers, was designing a \$1 million retail center for the southeast corner of Mill Avenue and 8th Street (University Drive). Dr. Charles W. Seachrist of Flagstaff bought the old Tempe High School campus which formerly occupied the two-block site, and selected the O'Malley Investment Company to supervise the development of

⁴⁶ TDN, 24 Aug 1953, 3 Feb 1954; Tempe Business Survey, THM.

⁴⁷ TDN, 10 Jul 1950, 8, 12 Feb, 15, 17 Nov 1955, 2 Feb, 4 Apr 1956.

the proposed Tempe Shops Center. Local builder Howard W. Brooks was chosen as superintendent of construction. After numerous delays, the H & J Construction Company of Phoenix began building the 118,000-square foot L-shaped structure in March 1956. The broad paved parking lot in front of the shopping center provided space for 780 cars. When it opened in late 1956, Tempe Center offered customers convenient shopping, with a range of stores and personal services on a scale that rivaled downtown. The primary business was El Rancho Market, a 20,000 square foot store operated by a California-based supermarket chain. Twenty-six other shops were located in the two long wings that extended to the north and west of the supermarket. The first businesses to open in Tempe Center included the W. T. Grant Company (23,400 sq. ft.), Ryan-Evans Drugs (5,000 sq. ft.), Porter's Pioneer Clothing Store (3,500 sq. ft.), Gallenkamp's Shoes (2,400 sq. ft.), Kings Fashions, Pioneer Camera Shop, and Ray Boles Barber Shop. Bimbo's Drive-Inn, a free-standing drive-through restaurant, was built at the corner of Mill and 8th Street, and a Standard Oil Company service station was built on 10th Street, at the southwest corner of the shopping center.⁴⁸

The completion of these two new commercial centers marked a significant change in the way retail business was developed in Tempe. These self-contained one-story commercial blocks wrapped around parking lots where designed to provide variety and convenience for their customers. However, the developers of shopping centers did not strive to replicate all the commercial activity of downtown; rather, they were designed to serve the suburban population that was growing at the out edges of town. Tempe Center's central location was close to dozens of new subdivisions to the west and south; the A. J. Bayless Shopping Center was the only significant trade center for all of the east Tempe neighborhoods between Rural and Price roads. The development of neighborhood shopping centers was a growing national trend, and the success of these retail centers was due largely to their location: businesses were moving closer to where their customers lived.⁴⁹

Before World War II, several small auto courts and service stations were built east of town along the Tempe-Mesa Highway, which connected with East 8th Street. After the war, the highway was realigned with East 13th Street, and new automobile- and tourist-oriented businesses were built within city limits, with most being concentrated in the corridor along East 13th Street, from the curve at Mill Avenue to Rural Road. In 1945, Maurice Barth bought a two-acre site at 634 East 13th Street and built the Wigwam Lodge, an auto court with six brick cottages and a main lodge, all shaped like teepees. By 1947, several more small auto courts and motels were built in the area, including the Kozy Motel (628 East 13th Street), the Warren Tourist Apartment Court (1132 South Van Ness), Tempe's Breezy Palms Motel (420 East 13th Street), and the Bonnie Villa Court (803 East 13th Street). Most had swimming pools. Fine dining and entertainment was offered at Bennett's The Palms (623 East 13th Street).⁵⁰

⁴⁸ TDN, 13 Jan, 5 Feb, 14 Jul, 17 Oct, 14 Dec 1955, 21, 28 Jan, 22 Mar, 27 Apr, 30 Aug 1956, 7 Aug 1957, 21 Jan 1958; Liebs, pp. 30-31, 132.

⁴⁹ Liebs, pp. 30-31, 132.

⁵⁰ TDN, 12, 19 Jul, 3 Oct, 13 Nov 1945, 23 Apr, 9 Jun, 16 Oct, 6, 10 Dec 1947, 11 Aug, 18 Sep 1954; "City of Tempe Multiple Resource Area Update" (City of Tempe and Don W. Ryden, AIA Architects, Inc., 1997).

East 13th Street was renamed Apache Boulevard in 1950, and designated as a key link in several major routes through the state, including U.S. Highways 60, 70, 80, and 89, and State Route 93. During the 1950s, several new service stations and hotels were built on Apache Boulevard between Rural and McClintock, including the Whispering Wind Lodge (1814 E. Apache) and the Hudson Manor Hotel (1461 E. Apache). In 1958, state engineers began planning improvements to the roadway, including widening the pavement and installing medians and left turn lanes. However, this was not popular, especially with residents and business owners in the eastern portion of the city who were concerned that the medians would disrupt local traffic. More than a thousand people signed petitions protesting the road dividers and left turn lanes on Apache, but the redesign of the highway proceeded. In 1960, a group of Chicago investors announced plans to build the Tempe Sands Motel on the southeast corner of Apache and McAllister. The site was selected not only for its location on the heavily traveled thoroughfare, but for its proximity to Arizona State University. Patterned after Sands motels in Los Angeles, Phoenix, Tucson, and Chicago, the \$1.75 million hotel would have 100 rooms and banquet facilities for 250 people. It was completed in 1961.⁵¹

By 1960, there were only two shopping centers in Tempe -- A. J. Bayless Shopping Center and Tempe Center. In the 1960s, this type of retail development became the norm, with many new neighborhood shopping centers located at major crossroads throughout Tempe. Commercial development after 1960 also continued the trend of building freestanding small businesses along arterial streets.

HISTORIC CONTEXT: INDUSTRIAL DEVELOPMENT IN TEMPE, 1946-1960

The processing and shipping of agricultural produce had always been an important component of Tempe's economy. Beginning in the 1870s, the Hayden Flour Mill had milled and packaged locally produced grain and transported it by freight wagon to markets throughout Arizona. After 1900, the mill continued to expand, increasing production and shipping flour products nationally via rail. Through the early 20th century, other agriculture-dependent industries emerged. By 1921, there were three cotton gins in Tempe, but none of them were still in operation at the end of World War II. The Borden Creamery on East 8th Street pasteurized and canned a considerable amount of the locally produced milk.⁵²

During World War II, Tempe became a major shipping center for citrus fruit grown in the Kyrene and South Mountain areas. After the war, new packing plants were built and existing ones were expanded. The Maricopa Citrus Company operated a packing shed in a 40-year old

⁵¹ TDN, 5 Aug, 21 Dec 1950, 19 Jun, 3 Sep 1952, 20 Jul 1953, 5 Oct 1956, 25, 27 Apr 1957, 26 Feb, 15, 28 Aug, 22 Sep 1958, 5 Jan 1959.

⁵² Historic Property Survey files, HPS-193 (Hayden Flour Mill), HPS-150 (Tempe Cotton Exchange Seedhouse), HPS-151 (Tempe Creamery/Borden Milk Co.), HPS-152 (Tempe Creamery Office), THM.

warehouse between 5th and 6th streets. The Desert Citrus Products cannery was located at 8th Street and Ash, along the Southern Pacific Railroad tracks; a new 50' x 80' frame and corrugated metal warehouse was added in 1946 by Tempe contractor Harry Hazard at a cost of \$5,000. Consolidated Citrus Growers, owned by Morris Coleman and Virgil Merrill of Mesa, built a \$10,600 plant at 401 S. Farmer Avenue in late 1945. The cement block and steel structure measured 80' x 110', and had a capacity of 600 cars of fruit per season. Harry Hazard also built a \$10,000 citrus packing plant for the Bayless Packing Company of Phoenix at 515 Farmer Avenue, on property leased from Southern Pacific Railroad. This 40' x 140' building was built of concrete, corrugated iron, and steel. The Orange Exchange Products Company of California owned a citrus juice cannery on 8th Street, which canned orange, lemon, and grapefruit juice, and processed rinds into cattle feed. In 1952, the company built a new \$100,000 dehydration plant. In 1946, Dwight Hartle and Arthur Burgher, both longtime citrus growers in the Valley, formed the Tempe Citrus Company (later known as Tempeco Groves, Inc.). They bought the new Bayless Packing Company plant at 5th Street and Farmer and began shipping produce for Mutual Orange Distributors. All of these plants were located along Farmer Avenue, between 4th Street and 8th Street (University Drive), and had direct access to the railroad.⁵³

Other produce shipped from Tempe after the war included lettuce, cantaloupes, and grapes. Valley Producer Distributing Company took over operation of a lettuce packing plant at 5th Street and Ash in 1945. Owners Charles Wood and Dan Eitreim built a new \$20,000 plant. Borg Vineyard of Scottsdale owned a grape packing shed on the east side of the railroad tracks, between 5th and 6th streets. After the original shed was destroyed by fire in 1954, a new 30' x 130' plant was constructed at a cost of \$10,300.⁵⁴

The Hayden Flour Mill undertook major expansions of its facility in the late 1940s and early 1950s. Improvements included warehouses, grain pits that were blasted into the butte, and a \$10,000 grain loading plant. In 1951, concrete grain elevators and silos were built at a cost of \$225,000. The Mayer-Osborn Construction Company of Denver erected the 120-foot high silos, which required eleven days of continuous cement pouring. The headhouse at the south end of the elevators was 150' high. When finished, the mill had a grain storage capacity of 306,000 bushels.⁵⁵

Meat packing was also an important industry in the Tempe area. The Tovrea Meat Packing Company, located just west of Tempe at Washington and 40th streets, was one of the biggest meat processing plants in the state. It was bought by the Cudahy Packing Company in 1947. The Phoenix Packing Company had established a small meat packing plant on a 40 acre site on South 56th Street (Priest Drive), just southwest of Tempe in 1912. E. P. Hilton, a Tucson rancher, bought the plant in late 1944 and renamed it the Tempe Meat Packing Company. It was sold to the Five Spear Cattle Company in 1950, and then to Bob Poer in 1951. Poer expanded

⁵³ TDN, 24 Jan, 25 Jul, 29 Nov 1945, 27 Jun, 9 Aug, 14 Oct, 28 Nov 1946, 21 Aug 1953, 11 Aug 1954; "Economic Survey of Eastern Maricopa County" (Bureau of Business Services, Arizona State College, 1955), p. 44.

⁵⁴ TDN, 1 Mar 1945, 15 Apr, 3 May, 3 Jul 1954.

⁵⁵ Historic Property Survey file, HPS-193 (Hayden Flour Mill); TDN, 22 May 1945, 12 Mar 1948, 21 Apr 1949, 17 Mar 1951, 11 Mar 1958.

the plant, increasing its capacity from 25 head of cattle per day to 100 head per day. As new subdivisions started growing around Tempe, meat packing operations often found themselves in conflict with the new neighborhoods. In 1952, residents of south Tempe vigorously protested zoning changes that would allow Producers Livestock Marketing Association to use a 50-acre parcel south of the Southern Pacific Railroad tracks for a stockyard.⁵⁶

Right after the war, there were a number of small light manufacturing and shipping plants located in downtown Tempe. The O'Malley Lumber Company owned warehouses and platforms on the east side of the Southern Pacific Railroad, between 7th and 8th streets. Cool Vent Sheet Metal Awning Company operated an assembly plant in the Ellingson Warehouse at 7th Street and Maple. Engineering Services, Inc., converted the former Southwest Cotton Company warehouse at 30 East 4th Street into a light manufacturing plant. Bob Mutscher of Scottsdale established the Oak Creek Furniture Company and built a 50' x 100' furniture manufacturing plant at 149 South Farmer for \$8,000. The Whistle-Vess Bottling Company built a beverage plant at 1st street and Farmer. Pacific Western Enterprises, located at 24 West 7th Street, manufactured dairy coolers and freezers.⁵⁷

Tempe's population was rapidly increasing, but there were relatively few new jobs available in agriculture-related industries. Heavy industry and large-scale manufacturing was first established in Tempe in the 1950s. The community had changed tremendously in the years following the war, reflecting the right combination of attributes that were attractive to manufacturers -- a large work force, the establishment of engineering programs at Arizona State College, a growing demand for manufactured products, and lots of available land.

The Kyrene District, a citrus producing area just southwest of Tempe, proved to be an ideal location for industrial development. In 1951, Salt River Project began construction of the Kyrene Steam Generating Plant, a \$4.5 million plant on the east side of the Western Canal, about one mile south of Baseline Road. It was completed in 1952, and soon after, SRP announced plans for expansion with a \$10 million Unit 2. Vacant land around the power plant soon attracted the areas first heavy manufacturing plants. The land had access to high voltage power lines, El Paso Natural Gas Company's gas lines, and the Southern Pacific Railroad; it was close enough to population centers, but not in close proximity to any existing neighborhoods. In 1952, E. A. Spring, president and general manager of the Capitol Foundry Company of Phoenix, announced that his firm would build a Tempe foundry on 35 acres one mile east of Guadalupe, on South Kyrene Drive. A \$1,500,000 casting plant was completed in 1954. It produced steel balls used for grinding ore in Arizona smelters, and had an annual capacity of 5,000 tons. Armco Drainage and Metal Products, Inc., began building a \$100,000 steel fabricating plant on a 10-acre tract about a mile south of the Kyrene Steam Generating plant in 1954. The company produced Armco Steelex, a steel fabricated building material used for commercial, industrial, and school buildings, as well as corrugated metal drainage pipe. In 1955, Thunderbird Chemicals began building a \$11 million factory on an 80-acre site next to the Armco plant. It began production of agricultural and industrial chemicals in 1957. In 1958, Yuba Consolidated Industries, Inc., of

⁵⁶ TDN, 28 Dec 1944, 3 May 1947, 22 Dec 1950, 24 Mar 1952, 16 Jan 1958.

⁵⁷ TDN, 10 Mar, 1, 11 Dec 1945, 1, 14, 30 Mar 1946, 11 Jul, 24 Sep 1947.

San Francisco bought California-based Western Rolling Mills and moved the plant to a 140-acre site next to the Armco plant. The factory was built by Judson-Pacific-Murphy Company, another subsidiary of Yuba Consolidated. The main unit, a 340' x 210' steel and concrete building, was completed in early 1959. An electric furnace used scrap steel to produce steel reinforcing bars and light structural shapes such as angles, channels, and rods for the home building industry. The company's total investment in the land and construction was \$2.5 million. The plant employed about 240 people by the end of 1959, and planned to eventually hire up to 500.⁵⁸

In 1956, Penn-Mor Manufacturing Corporation, a subsidiary of Walter W. Moyer Company, Inc., of Ephrata, Pennsylvania, announced that it would open a factory in Tempe. A 37,000-square foot plant was built on a ten-acre site at 1501 South Rural Road by local contractor Cliff Seibert. It started operation in February 1957 with 20 employees under the direction of general manager Rowland G. Oonk. The company manufactured women's, girls', and infants' underwear, including some styles made from Pima cotton. Four additions to the factory were built through the early 1960s. By 1969, the plant had a total of almost 80,000 square feet and employed 400 people in sewing, packaging, and shipping.⁵⁹

More manufacturing plants were established within city limits. LeNore Garments, Inc., built a \$1 million factory at 230 West 5th Street, just east of the Southern Pacific crossing. The 8,000-square foot plant employed 40 to 50 people. The Los Angeles-based Ace Stamp & Stencil Company established a factory in an old building at 30 East 4th Street. The firm, which produced small aircraft parts, was a subcontractor to AiResearch Manufacturing Company of Arizona.⁶⁰

The Tempe Airport was built in 1945 on 80 acres south of Broadway Road and west of Mill Avenue. It had a half-mile long airstrip and several hangers. It was initially expected that light industrial businesses would be located around the airport, but there was no actual effort to develop the site until 1955, when the O'Malley Investment Company requested that the City Council rezone the Tempe Airport for "garden-type" industrial use so that it could be turned into the Tempe Industrial Park. The Council initially turned down the request, fearing that it would hinder residential development in the area. However, the developer was persistent, and offered to adopt minimum design standards, including paved roads, wide setbacks, and block construction of all buildings. The City Council ultimately approved rezoning with restrictions which specifically defined "garden-type" light industrial use -- no noise, no smoke, and no metal buildings.⁶¹

⁵⁸ TDN, 25 Apr, 4, 7 Jun 1952, 11 Jun, 10 Aug 1954, 21 May 1955, 16 Mar 1956, 29 Apr, 7, 8 Aug, 1 Oct 1958; "Economic Survey of Eastern Maricopa County," p. 44; Letter, Edwin E. Proctor to Dena McDuffie, 24 Feb 1990, in Tempe History file, TH-460 (Manufacturing), THM.

⁵⁹ TDN, 5 Oct 1956, 31 Jan, 12 Mar 1957, 11 Oct 1960, 16 May 1963, 20 Apr 1964, 9 Apr 1969; *Arizona Republic*, 26 Apr 1964; Tempe History file, TH-461 (Penn Mor), THM.

⁶⁰ TDN, 26 Jan, 24, 28 Feb 1956.

⁶¹ TDN, 29 Jul, 3 Aug 1945, 22 Sep, 6, 18 Oct 1955, 4, 13 Jan 1956.

In 1958, the Southern Pacific Railroad Company and Central Arizona Property Corporation started developing a 480-acre industrial site called the Phoenix-Tempe Industrial Center. It was located in the newly incorporated area of west Tempe, in the northwest quarter of Section 28, and extended from a quarter mile south of Broadway Road to Southern Avenue, between the Southern Pacific Kyrene branch line and Priest Drive. The City Council granted a request to rezone the area to Industrial II. The purchase price of the land and development costs for installing streets and utilities amounted to \$2 million. The Southern Pacific-Central Arizona Property partnership estimated that the site would soon attract up to \$20 million in additional industrial development.⁶²

Other smaller industrial parks were established in Tempe. In 1955, Hyman M. Dreiseszum and Associates and Morrison-Neeriemer Investment Company bought a 113-acre site from the Producers Livestock Marketing Association. It was located between Broadway Road and the Southern Pacific Railroad right-of-way, along both sides of McClintock Drive. The site was planned for industrial development, and was annexed by the City. However, no new plants were built there, and in 1959, when the Normal Junction Industrial District was actually formed, it was reduced in size to only 40 acres on the west side of McClintock Drive. The Tri City Industrial Area was developed by Thunderbird Properties, Inc., in 1960. It was located between 1st and 5th streets, from Hayden Road to Perry Lane. Light manufacturing and chemical processing businesses were planned for this area. The Dickson Electronics Corporation of Scottsdale was the first company to locate there, beginning construction of their plant in early 1961.⁶³

Some manufacturing activity was directly related to the booming homebuilding industry. In 1956, Payless Cashways Lumber Company bought the Sunshine Farms property and built a frame and metal lumber shed at the railroad crossing on Rural Road. Arizona Sand and Rock Company operated the "East Branch Plant" at 1500 East 8th Street (University Drive), on undeveloped land being held by Arizona Public Service Company. Superlite Builders Supply Company of Phoenix opened a block manufacturing plant on a 27-acre site at the southwest corner of University and McClintock drives in early 1958. By the end of the year, he company started a \$1 million expansion project, which included installation of \$400,000 worth of new equipment. The improvements boosted the plant's production to 80,000 Superlite pumice blocks daily. The company also manufactured Cordek, a precast reinforced structural unit for flat decks and ceilings. In 1959, Arco Products Company took over the Exchange Orange Products plant at 8th Street and Ash and began manufacturing 12-foot reinforcing bars for masonry construction.⁶⁴

As early as 1948, the Salt River Valley Water Users Association was planning to relocate its main office from Phoenix to a site near the Crosscut Power Plant north of Tempe. In 1955, the City of Tempe sold 29 acres of Papago Park property to the Salt River Power District to build a \$1 million general office building. The Project Administration Building would house the combined offices of SRP and SRPD, an administrative and technical staff of 400 employees.

⁶² TDN, 11, 30 Jul, 8 Nov 1958.

⁶³ TDN, 2 Nov 1955, 13 Aug 1960; "Economic Market Analysis: City of Tempe Neighborhood Development Program" (Bureau of Business and Economic Research, Arizona State University, 1973), pp. 137-138.

⁶⁴ TDN, 16 Aug 1956, 21 Nov 1957, 15 Dec 1958, 18 Feb 1959.

Since the site was situated at the "Y" where Washington Street turned into Van Buren, Architect Kemper Goodwin designed a building with four fronts, set into a natural desert landscape. Wes Meyer Construction Company was general contractor for the project. The two-story brick and steel building was 307' x 270', with four wings in a cross-shaped plan, each 79' wide. The 75,000-square foot building was completed in 1957.⁶⁵

In 1954, the Arizona Public Service Company bought 160 acres at the northwest corner of McClintock Drive and Transmission Road (University Drive) for a future power plant site. In January 1958, APS announced its plans to build the \$30 million Ocotillo Power Plant. The company expected to spend \$7 million in 1958, \$15 million in 1959, and \$7 million in 1960 to complete the three year construction project. Engineering and construction was supervised by Ebasco Services, Inc. The generating plant had twin steel towers, each encasing a 115,000-kilowatt generating unit. More than 15,000 cubic yards of concrete were poured for the pads that support the two boilers and turbo-generators.⁶⁶

In 1959, Solid State Electronic Controls, Inc., a subsidiary of Controls Company of America, announced plans to build an \$85,000 electronics plant on a ten-acre site in the Phoenix-Tempe Industrial Park. Mardian Construction Company erected a 10,000-square foot brick building at 811 West Broadway Road. It was designed to later be expanded to 80,000 square feet. By late 1959, Dr. Friedrich W. Schwarz, president and general manager of the plant, was preparing to hire the first 200 employees.⁶⁷

In May 1960, Arizona United Dairymen announced plans to build a processing plant on a ten-acre site at Broadway and Hardy. The plant was designed by the architectural firm of Horlbeck and Hickman. Hal Grammar Construction Company built the one story 11,000-square foot building of red brick masonry reinforced with steel. The \$500,000 plant was completed in late 1960, and began production with a capacity 300,000 pounds milk per day.⁶⁸

After 1960, residential development continued to spread throughout Tempe, and new industrial development was essentially limited to the industrial areas that were established in the 1950s -- the Phoenix-Tempe Industrial Area, the Kyrene Road corridor, and the Tri City Industrial Area.

⁶⁵ TDN, 11 Jun 1948, 17 May, 9 Sep, 30 Dec 1955, 12 Mar 1957, 1 Jan 1958.

⁶⁶ TDN, 13 Oct 1954, 23 Jan, 18, 20, 21 Mar, 17 Apr 1958.

⁶⁷ TDN, 12, 13 Oct 1959.

⁶⁸ TDN, 11 May, 9 Jun 1960.

HISTORIC CONTEXT: HIGHER EDUCATION IN TEMPE, 1946-1960

Arizona State Teachers College became Arizona State College at Tempe on March 9, 1945. This was a key turning point for the college, which was finally authorized to award degrees in Liberal Arts and Sciences, as well as in education. President Grady Gammage, who had promoted the growth and development of the school since 1933, began expanding programs in science, business, agriculture and industrial arts, and liberal arts. The timing of the college's change in status was auspicious. Across the nation, millions of returning veterans had no job and were considering going to college. The G.I. Bill of Rights, championed by Arizona's junior Senator, Ernest McFarland, offered veterans an educational allowance to go to college. The impact of this benefit was very evident in Tempe. Immediately after the war, enrollment at Arizona State College grew at a remarkable rate. In the fall of 1945, there were 553 students at the college; by spring 1946, attendance had grown to 1163, and in fall 1946, enrollment nearly doubled again to 2180. It was estimated that more than half of the students at ASC in 1946 were World War II veterans. The student body continued to grow through the late 1940s, and eventually stabilized; there were slightly over 4,000 students at the college each year through the early 1950s.⁶⁹

The most immediate effect of growing enrollment at ASC was a sudden and severe shortage of student housing on campus. To provide housing as quickly as possible, the college planned a 150-unit Veterans Trailer Home Project which became known as Victory Village. College business manager Gilbert Cady purchased 50 used trailers from the abandoned Poston Japanese Relocation Camp for \$18,000. In January 1946, the first six trailers were installed in a field between Mill and College, north of 13th Street, at the bend in the highway where Mill Avenue turned into East 13th Street (Apache Boulevard). The trailers were rented to married World War II veterans for \$25 a month. By November, there were 65 families living in Victory Village. In April 1947, twenty-four wood frame apartments were transported from the former Rivers Japanese Relocation Center and converted into one- and two-bedroom apartments. The college also explored other ways to make housing available. The Hotel Casa Loma agreed to house 100 male student on the first and third floors; porches were converted into rooms and furnished with cots. Also, construction was rushed for several dormitories that had been in the planning stages. By March 1947 Unit C of Irish Hall and East Stadium were completed. East Stadium, or Haigler Hall, was a wedge-shaped concrete building that served two purposes: it had rooms for 145 men, and it provided seating for up to 5,000 spectators at Goodwin Stadium. By early 1948, there were 657 men and 414 women living in six halls on campus.⁷⁰

⁶⁹ Ernest J. Hopkins and Alfred Thomas, Jr., *The Arizona State University Story* (Phoenix: Southwest Publishing Co., Inc., 1960), pp. 245-248, 252, 263-265, 291; David Scheatzle, *ASU from the Air: Yesterday Today and Tomorrow* (Tempe: Herberger Center for Design Excellence, Arizona State University, 2000), pp. 16-18; TDN, 5 May 1954.

⁷⁰ TDN, 27 Nov 1945, 11, 18 Jan, 4 Sep, 21 Nov 1946, 31 Jan, 16 Apr, 10 Jul, 2 Oct 1947, 1 Jan, 10 Feb 1948; Hopkins and Thomas, p. 268; Scheatzle p. 18; *Vanished ASU* (University Archives, Arizona State University, n.d.), pp. 10-11.

Other campus buildings were built at a slow but steady pace through the late 1940s. William Danforth, a St. Louis industrialist, founded the Danforth Foundation to help build meditation chapels on college campuses across the country. He offered to contribute \$5,000 toward the construction of a chapel at ASC if matching funds were raised. The Phoenix architectural firm Lescher and Mahoney designed the two-story brick chapel, which had a nave, vestibule, front porch, office, 2nd floor choir loft; and seating for 50 people. Built at the northwest corner of College Avenue and Orange Street, the Danforth Chapel was completed in December 1947 and dedicated on 26 Feb 1948, with William Danforth speaking.⁷¹

Lescher and Mahoney also designed a new \$500,000 science building for the college (HPS-246). The William Pepper Construction Company started work on the three-story reinforced concrete building in December 1946. It was 208' long and 89' wide at the center, tapering to 64' wide at both ends. There was a central lecture hall on each floor. The exterior of the building was adorned with concrete plaques depicting the story of science and the names of 18 great scientists.⁷²

In 1949, the Legislature approved a four-year \$4 million expansion program at ASC. New construction in 1950 and 1951 included expansion of Matthews Library and the heating plant, an Administration-Business Administration-Agriculture building, a men's dormitory and a women's dormitory, and a Home Economics building. By 1951, buildings nearly filled the campus, now extending between Mill and College avenues down to 13th Street. Construction continued into 1952 with a new Physical Education building and an infirmary.⁷³

In November 1954, the Board of Regents created four colleges at ASC -- Liberal Arts, Education, Applied Arts & Sciences, and Business Administration. The campus had been growing at a steady rate, and plans had to be made for the continued development of the college. James Elmore, head of the Architecture Department within the School of Engineering (who would later become founding Dean of the College of Architecture), drew up informal plans for the future development of the campus. He proposed replacing streets with pedestrian malls, and building an auditorium in the southwest corner of the college. However, it was becoming evident that ASC would soon run out of land for new buildings. Back in 1945, the Board of Regents passed up the opportunity to buy 80 acres south of Apache Boulevard for \$500 an acre; now that land had new houses on it. In 1955, the college began acquiring land north of 8th Street through the condemnation of Barrio Al Centro.⁷⁴

By the mid-1950s, dormitories were again becoming overcrowded, with nearly 300 more students living on campus than the resident halls were intended to house. The college needed a \$2 million housing fund from the Legislature just to keep up with growth. A series of small

⁷¹ TDN, 7 Dec 1945, 9 Jun, 10 Oct 1947, 13 Feb 1948, 16 Feb 1950.

⁷² TDN, 27 Mar 1946, 22 May, 27 Oct 1947, 1 Jan 1948.

⁷³ TDN, 11 Oct, 4 Dec 1948, 19, 28 Jul 1949, 8 Aug 1950, 4 Jan, 3 Mar, 16 Oct, 28 Nov 1951, 21 Mar, 12 Apr, 15 Oct 1952, 19 June, 25 Aug 1953; Hopkins and Thomas, pp. 274-277; Scheatzle p. 20.

⁷⁴ Scheatzle, p. 20, 22, 24.

men's dormitories were planned for a 15-acre site south of Apache Boulevard and east of McAllister, in what would become known as the Adelphi housing area. The student houses were to be leased to nationally-affiliated fraternities. The first five units were built in 1954 by the E. J. Wasielewski Construction Company of Phoenix for \$369,000. When the project was eventually completed there would be sixteen fraternity houses with a capacity of up to 30 men each. Each unit had its own kitchen and dining room. Tempe architect Kemper Goodwin designed the red brick houses, which had steel sash windows and asbestos shingle roofs. The first five houses were ready in October, and were occupied by the local chapters of Alpha Tau Omega, Delta Sigma Phi, Lambda Chi Alpha, Phi Sigma Kapp, and Tau Kappa Epsilon.⁷⁵

A Student Union building had been planned since November 1947, but too many other buildings were more urgently needed. In April 1951, students and alumni began a drive to raise \$350,000 to add to the Legislature's \$400,000 appropriation so that the Memorial Student Union Building could finally be built. Another \$400,000 appropriated for a new dining hall was added to the project, and fundraising eventually brought in \$439,322. A groundbreaking ceremony was held on 25 Oct 1954. Kemper Goodwin designed the \$1.3 million building, which was built by TGK Construction Company of Phoenix. The Memorial Student Union Building opened in 1956, and was named in honor of the nearly 100 former students who had died in the armed forces.⁷⁶

The Technology and Industry Building was designed by Phoenix architect Ralph Haver in 1956. This building was the college's first expansion into the neighborhood east of Normal Avenue. Soon after it was completed in early 1957, it housed a \$1 million General Electric Computer Center. The huge IBM 704 computer was used for training by both ASC and General Electric, and was also available for use by the University of Arizona and statewide government agencies and industries. Construction continued at a busy pace through the late 1950s. New dormitories, Sahuaro Hall and Palo Verde Hall, were built on the south and north end of campus. Other buildings completed included the Physical Sciences Building, the Life Sciences Building, and the College of Liberal Arts Building. In 1958, the Board of Regents approved a \$5,910,000 two-year capital budget for the campus that included two new classroom buildings, additions to four others, and a central air conditioning system and utility tunnel.⁷⁷

In the mid-1950s, students, Valley business leaders, and the ASC Alumni Association began a campaign to change the name of the college to Arizona State University. Arizona State College actually had four colleges, and was organized like a university, but the people of Tucson and their legislators were adamantly opposed to any institution other than their own using the words "University" and "Arizona" together. The Legislature would not authorize the name change, so ASU supporters began circulating initiative petitions. More than 29,000 signatures were needed to place the issue on the statewide ballot; in July 1958, proponents filed 64,681 signatures with

⁷⁵ TDN, 18 Sep 1953, 20 Apr, 6 Aug, 8 Oct 1954, 10 Jun 1958.

⁷⁶ Hopkins and Thomas, pp. 277-278, 285; TDN, 26 Nov 1947, 16 Apr 1952, 25 May, 9 Nov 1954.

⁷⁷ TDN, 17 Dec 1955, 19 Jan 1956, 23 Mar 1957, 1, 3 Jan, 25 Feb, 1 Mar, 21 May, 21 Jun, 13 Nov, 30 Dec 1958; Hopkins and Thomas, p. 292; "A Guide to the Architecture of Metro Phoenix" (Central Arizona Chapter, American Institute of Architects, 1983), pp. 152, 155.

Secretary of State Wesley Bolin. The initiative, known as Proposition 200, won by a vote of 151,135 to 78,693.⁷⁸

In 1948, the Sun Angels, a new organization formed to support sports programs at ASC, promoted plans to build a new stadium for the college. The City of Tempe offered to donate a site near Papago Park at the junction of Washington and Van Buren streets. The proposed stadium would seat 36,000 people, and would be used not only for regular college football games, but also for Major League Baseball, the annual Salad Bowl, and other events. The Board of Regents supported Sun Angels proposal, and in 1948, the governor approved \$750,000 for construction of Junction Stadium. However, the project was long delayed, due to other priorities. After ASC acquired land north of 8th Street, a second proposal for a stadium between the two peaks of Tempe Butte emerged. By 1956, Goodwin Stadium could no longer accommodate the crowds of people who wanted to see Arizona State football games. The Sun Devils had become a tremendously popular team. They had performed well under coach Dan Devine, and in 1957, the Sun Devils were highest scoring football team in the country, undefeated and ranked 12th nationally. This provided a greater incentive to build Arizona's largest stadium. From the two potential sites, junction and butte, the Board of Regents ultimately chose to build the stadium in the saddle between the two buttes. The decision was initially unpopular. Students, college officials, and the general public expressed concerns over possible construction delays and lack of parking. The architect, Kemper Goodwin, withdrew from the stadium project, claiming the site was ill-advised. The Phoenix architectural firm of Edward L. Varney and Associates was then selected to design Sun Devil Stadium. Construction began at the end of 1957. The massive cast concrete structure was built by F. H. Antrim Construction Company of Phoenix for \$635,000. At the time of completion, the stadium had 30,450 seats, but it was designed to later be expanded with an upper deck to eventually provide seating for 75,000 people. The first game played in the new stadium was between the Sun Devils, led by new head coach Frank Kush, and the West Texas State Buffaloes on October 4, 1958, with a crowd of 28,200 in attendance.⁷⁹

Since the early 1900s, a large letter representing the College has adorned the south face of Tempe Butte. Originally, an "N" was built on the butte for the Tempe Normal School. The letter was later changed into a "T" for Tempe State Teachers College, and after World War II, when the school was renamed Arizona State College, it was rebuilt as an "A." In 1947, pranksters from Phoenix College used dynamite to try to blow up the "A" in middle on night. The letter was slightly damaged. For several years, students discussed rebuilding the "A" into a permanent monument. In 1955, the letter was finally recast with six inches of concrete. The Blue Key national honorary service organization raised \$500 for the project. In 1958 a second "A" was built on the butte facing the stadium. The original "A," which has been maintained by students, represents long-standing pride and tradition at Arizona State University.⁸⁰

⁷⁸ Hopkins and Thomas, pp. 297-302; TDN, 17 Apr, 25 Jun, 1 Jul 1958.

⁷⁹ TDN, 22 Oct, 4 Dec 1948, 29 Mar 1949, 24, 26 Jun, 15, 16, 17 Jul 1957, 20, 24 Jan, 12 Jul, 13, 30 Aug, 3 Sep, 2, 6 Oct 1958; "A Guide to the Architecture of Metro Phoenix," p. 158; Hopkins and Thomas, pp. 268-271, 296; Dean Smith, *The Sun Devils; Eight Decades of Arizona State Football* (Tempe: Arizona State University Alumni Association, 1979), pp. 44-47.

⁸⁰ TDN, 12 Nov 1947, 17 Mar 1949, 23 Apr 1955, 31 Jul 1958.

In 1960, G. Homer Durham became President of Arizona State University. In that year, the university had a 250-acre campus with 60 buildings which housed four undergraduate colleges and a graduate college with a total student body of more than 10,000. Plans were underway to build a new education building and an auditorium designed by Frank Lloyd Wright. One of President Durham's priorities was to establish a long-range plan for development of the campus. Professor Elmore presented the Master Planning Study of the Campus of Arizona State University, the result of his five years of work with local architects. The long-range plan that was adopted included maintaining uniform building styles, with all new buildings being constructed of buff-colored brick; and closing off automobile traffic through the campus and creating pedestrian malls with paved plazas and walks, benches, pools, fountains, walls, gates, sculpture, lights, exhibits and other outdoor furnishings. The planning decisions made in 1960 greatly influenced the physical development of Arizona State University through the next decade.⁸¹

**HISTORIC CONTEXT:
ELEMENTARY AND SECONDARY EDUCATION IN TEMPE, 1946-1960**

During World War II, the population of Tempe had steadily grown, but restrictions on new construction brought overcrowded conditions in Tempe schools. At the end of the war, it was estimated that the need for more classroom space would require expenditures of \$100,000 for Tempe High School and \$50,000 for elementary schools. However, with the post-war boom in residential construction and the ensuing boost in Tempe's population, these projections would quickly prove to be inadequate. During the period from 1946 to 1960, Tempe Elementary School District No. 3 was one of the fastest growing districts in the state; its operating budget increased at an average rate of more than 25% each year, rising from \$102,314 in 1946 to \$1,663,177 in 1960. And a proposed expansion of the high school was soon found to be an impractical approach to dealing with the growing student body. Construction of new schools in this period reflected the scale and distribution of Tempe's residential development.⁸²

There were two public elementary schools in 1946, the Eighth Street School and the Tenth Street School. In addition, there was the Payne Training School, which was operated by Arizona State College for training student teachers, and a Catholic parochial school operated in the basement of Our Lady of Mount Carmel Church. The Eighth Street School, which had been a segregated school for Hispanic children since 1915, was closed in 1946, and most of its students were integrated into the Tenth Street School. The district acquired responsibility for even more students when it annexed Rohrig School District No. 5, extending east to the Tempe Canal. It sold the little Rohrig School and bused the students to Tempe.⁸³

⁸¹ Scheatzle, pp. 22-28; Hopkins and Thomas, pp. 291, 295.

⁸² Rose DeForest, Tempe School District No. 3; A History, 1874-1991 (Tempe: Tempe School District No. 3, 1991), pp. 51-60; TDN, 17 Aug 1945.

⁸³ DeForest, p. 51; TDN, 24 Jul 1945, 29 Jun 1946, 7 Feb 1958.

A bond election was held on 19 June 1947, and voters approved the measure to build an addition to the Tenth Street School. It was the first expansion of the school since 1931, when enrollment was at 625; now twice as many students were expected to enroll in the next year. The Tenth Street Grammar School Annex was designed by Tempe architect Kemper Goodwin; it was the first of many projects that he would work on for the district. R. B. McKenzie, a Phoenix contractor, erected the new brick building with eight classrooms and a shop building at 10th Street and Forest for \$92,000. It was completed in early 1948, but by that time, it was already inadequate for the number of new students that had moved into the district.⁸⁴

In 1948, Mrs. Wayne Ritter offered to sell six acres on the east side of town to the school district for \$6,500. The district bought the site on East Tyler Street, between McAllister and Rural. Voters overwhelmingly approved a bond issue of \$215,000, by a vote of 206-8, and construction began immediately. The William Pepper Construction Company built the new school at 815 East Tyler Street, the first of many schools the company would build in Tempe. Wayne Ritter School had 21 classrooms, an auditorium, and a cafeteria. It was completed in September 1950.⁸⁵

By 1951, district attendance had risen to 1,710. On July 24, a school bond election for \$231,000 to build another school on the west side passed by a 5-1 margin. A nine-acre site was donated by W. W. Mitchell, who had developed several subdivisions in the area. Contractor C. O. Johnson and Son of Phoenix built the new school at 9th Street and Mitchell. It had 12 classrooms, offices, and a combination cafeteria and auditorium, or cafetorium, as well as a maintenance shop and a kindergarten. Mitchell School opened September 1953.⁸⁶

The School Board was also faced with the prospect of building a separate segregated school for African American children living in Okemah, a small community between 40th and 48th streets, on the western edge of the district. In 1951, the Tempe district entered into an agreement with the Roosevelt School District, which took responsibility for busing and educating Tempe's African American children. But a year later, the Roosevelt District was becoming overcrowded and could no longer accommodate Tempe's students, so Black students from Okemah were sent to all three Tempe Schools: Tenth Street, Ritter, and Mitchell.⁸⁷

The Tempe School District annexed Rural School District No. 13 in 1951, but rescinded the decision after protests from Tempe residents. However, the Rural School District was eventually annexed in April 1953, and Tempe acquired two more schools, Rural and Guadalupe. The Guadalupe School included the original adobe schoolhouse plus ten surplus barracks that had been moved to the site after the war.⁸⁸

⁸⁴ DeForest, pp. 51-52; TDN, 26 May, 20 Jun, 16 Aug, 6 Sep 1947.

⁸⁵ DeForest, pp. 52-53; TDN, 13, 24, 30 Jan, 8, 9, 28 Jun 1950.

⁸⁶ DeForest, pp. 53-55; TDN, 11, 25 Jul 1951, 2, 29 Jan, 4 Feb 1952.

⁸⁷ DeForest, pp. 52, 54; TDN, 15 Sep 1952.

⁸⁸ DeForest, pp. 54-55.

Even with five schools, the district was not keeping pace with the level of homebuilding in Tempe. In 1953, enrollment climbed to 2047 students. The School Board planned to build another new school to the south. In 1954, Milton Aepli offered to sell the district ten acres of land east of College Avenue and south of Broadway Road for \$20,000. At the time, there was only one house that had been built south of Broadway. In a bond election on 25 Sep 1954, voters approved \$455,000 for construction of El Cielo School. Daum-Donaldson Construction Company built the \$210,000 school building, which had 16 classrooms, a cafetorium, an office, and storage space. By the time it opened in September 1955, it was renamed Broadmor School, for the new subdivisions that had quickly grown around it. Architect Kemper Goodwin designed Ritter, Mitchell, and Broadmor schools.⁸⁹

Overcrowding became a problem at Tempe High School in the late 1940s. As early as September 1945, plans were being made for expansion of the high school campus. The Tempe High School Governing Board wanted to buy the Eighth Street School property, but it couldn't agree with the elementary district on a purchase price, so the high school board considered building a new school just south of Tempe. In a bond election on 22 April 1951, the district was authorized to spend \$350,000 for the purchase of a 38-acre site at Mill and Broadway, owned by E. W. Hudson. In second bond election on 5 Jan 1952, voters approved \$700,000 for construction by a 4-1 ratio. The total cost of building the high school would be about \$1,250,000, but the district planned to build the first units of the new school, then sell the old high school property for \$550,000 to pay for completion of remaining buildings. Kemper Goodwin was selected as architect for the project, and William Pepper Construction Company was awarded the contract for building the first six buildings of the new campus for \$622,000. The new Tempe High School, as completed by September 1953, had six red brick buildings, including a cafeteria with a covered ramada, a library with two study halls and classrooms, a home economics building, an administration building, a science building, and a general classroom building. Walks and covered arcades connected all buildings, and the campus was further defined with landscaping and planter boxes. Local contractor Cliff Seibert was hired to build a 40' x 60' building on the southwest corner of the campus for use as temporary showers and dressing rooms. The new high school opened in September 1953 with enrollment of 714 students. Two years later, Pepper built a gymnasium and shop building.⁹⁰

In 1956, the elementary district gained voter approval to sell the Tenth Street School to Arizona State College, which used the building for its Campus Laboratory School. By this time, it was anticipated that 200 more new students would be enrolled in Tempe schools, so the district began another round of construction. Antrim & Scherman, general contractors, began work on the new Concorda Intermediate School in 1956. This was Tempe's first school based upon the new junior high or middle school concept. The school, with 21 general classrooms, 5 special classrooms, a library and a cafetorium, was built on a 15-acre site on South College Avenue at a cost of \$468,000. Also, another eastside school was being built at Howe Street and River Drive.

⁸⁹ DeForest, pp. 55-57, 104; TDN, 13 Jan, 8, 9, 28 Jun 1950, 2, 29 Jan 1952, 17 Sep 1953, 1 Jan, 4 Feb 1955.

⁹⁰ TDN, 25 Sep 1945, 28 Feb 1946, 3 Jun 1947, 28 Mar, 24 Apr 1950, 8 Nov, 5 Dec 1951, 3, 7 Jan, 9 Jul, 2, 6, 15 Oct 1952, 18, 31 Jul, 29 Aug, 8 Oct 1953, 1, 31 Jan, 10 Jun, 3, 4 Aug 1955; DeForest, pp. 51-52.

William S. Porter, a Mesa contractor, built the school with 19 classrooms and a cafeteria for \$292,800. The two new schools were named for Harvey M. McKemy, superintendent of the district for 24 years, and Miss Flora M. Thew, a Tempe teacher for 45 years. McKemy Intermediate School opened March 1958 and Flora M. Thew School opened September 1958. Also completed at this time was a six-room addition to Broadmor School, which was built by the R. C. Stacey Construction Company of Phoenix for \$72,000.⁹¹

In 1958, Kemper Goodwin started designing three new buildings for the Tempe High School campus. A 1,000-seat auditorium and music building was built by R. C. Stacey Construction Company for \$345,500; Cliff Seibert constructed a 60' x 128' farm shop unit for \$53,850; and Burr and Son of Mesa built an 11-unit classroom building. All were of red brick masonry construction with steel truss roof, matching the original buildings. In the fall of 1958 enrollment at the high school was at 1190. At this time, the Board selected a site for a second high school, which was being planned for the near future. The district agreed to buy 33 acres from rancher Ben Taylor on McClintock Road, north of Southern Avenue. To cut costs, the district leased the land back to Taylor for three years.⁹²

In the fall of 1958, there were seven schools in Tempe Elementary School District No. 3, with 144 teachers, an administrative staff of 14, and 75 non-teaching staff members. Total enrollment in October was 3,474.

SCHOOL	ATTENDANCE
Ritter	466
Mitchell	760
Broadmor	682
Guadalupe	290
Rural	163
McKemy	603
Thew	510

By the end of the year, enrollment had increased to 3,856, but the seven schools had enough room to accommodate growth for two years. Several new schools were planned in 1960 and built in 1961, including Holdeman School, Curry School, a new Rural School, and Gililand Intermediate School, as well as improvements to the other schools.⁹³

There were other schools in addition to the public school system. In 1945, the Sisters of Charity of the Blessed Virgin Mary from Dubuque, Iowa, started operating a parochial school in the basement of Our Lady of Mount Carmel Catholic Church. A school building was built in 1951 on the other side of College Avenue between 6th and 7th streets. Our Lady of Mount Carmel Parochial School was designed by Phoenix architect Lloyd L. Pike and built by contractor Glenn

⁹¹ DeForest, pp. 58-59; TDN, 22 Jul 1955, 30 Apr 1957, 1, 10 Jan, 11 Feb 1958.

⁹² TDN, 1, 15, 23 Jan, 13, 19 Feb, 28 Mar, 17, 30 Apr, 1 May, 1 Oct 1958.

⁹³ DeForest, pp. 59-60; TDN, 2 Oct 1958.

Chipperfield. During the summer and fall of 1951, the first unit was built, with four classrooms, offices, and infirmary, at a cost of \$52,000; four more classrooms were to be added in the future. The school, built of "Walpai" brick, could accommodate 200 students, grades 1-8. The school was completed in November.⁹⁴

The Mount Carmel School on College Avenue was forced to move when Arizona State College started buying property on the north side of 8th Street (University Drive) for expansion of the campus. The T. J. Hughes family donated a 10-acre site for a new school. Designed by Tempe architect T. S. Montgomery and built by Hal Grammar Construction Company, the new school, located at 2121 South Rural Road, had eight classrooms, an office, school nurse's room, and library. There were two other buildings constructed on the school grounds: a convent with living quarters for twelve sisters, a chapel, office, and community room; and a social hall with a stage and kitchen. The school was completed in September 1957; the convent and social hall were completed in December 1957. Total cost of the school complex was \$245,000. Contractors Hennessy and Black built a four-classroom addition in 1960 at a cost of \$47,000.⁹⁵

Another school serving Tempe students was the Tempe Seventh Day Adventist Elementary School, which opened in the fall of 1951 in a remodeled home at 317 South Roosevelt Street. Instruction was provided for grades 1-8. By 1956, a new school was needed. The church bought a two-acre site on West 17th Place, on a cul-de-sac next to Clark Park, and built a school with four classrooms and a library.⁹⁶

ARCHITECTURAL CONTEXT

At the end of World War II, homebuilders, with prodding from the federal government, joined in a national goal of producing millions of new houses. Wartime restrictions on construction had created a serious housing shortage everywhere, and after years of austerity, people now had saved money and new jobs, and were eager to buy a new house. In the years right after the war, most new residential construction in Tempe consisted mostly of custom homes built in the new subdivisions of College View, University Park, and College Manor. Tempe builders used a variety of materials, including frame, frame and stucco, brick, and pumice block, and built homes of various sizes and styles, but virtually all of the new homes were one-story single-family houses built on a concrete slab. These simple, relatively unadorned houses could be produced quickly and inexpensively. Many prefabricated homes were also built throughout Tempe. The Tempe Realty Company hired Karl Guelich to build a demonstration Hayward Home in University Park, on the southwest corner of College Avenue and 14th Street. The house was made of factory-built wood frame sections which could be assembled into a customized

⁹⁴ TDN, 23 May, 9 Jul, 30 Nov 1951.

⁹⁵ TDN, 29 Apr, 20 May 1957, 7 Feb 1958, 15 Jun, 1 Sep 1960.

⁹⁶ Tempe History file, TH-510 (Churches), THM.

home on site. Cabana Homes, Mobilehomes, Wingfoot Homes, and Whalley Homes also built houses of pre-cut lumber and pre-assembled components. Local suppliers such as Tempe Lumber Company and O'Malley Lumber Company often served as contractors for both prefabricated and custom-built frame houses.⁹⁷

Throughout the country, homebuilding was quickly evolving into a process of mass production of housing, particularly single family detached homes. Construction materials developed before the war finally came into widespread use. Balloon framing, plywood, glues and caulks, a variety of milled lumber, concrete block, and prefabricated window units were particularly suited to fast and inexpensive building. Steel casement windows, with no counterweights, were fast and easy to install; they became a standard feature in most new homes built in the late 1940s and 1950s. Building methods also changed dramatically. An emphasis on large-scale production made it possible to built up to several hundred houses simultaneously, which allowed more efficient site engineering and greater specialization of labor. Between 1947 and 1951, William J. Levitt built 17,450 houses in Levittown, Long Island, using pre-cut lumber and industrialized building techniques. In Tempe, the Del E. Webb Construction Company was the first builder to apply production line assembly techniques to build homes on a large scale. Standardization and large-scale production allowed homebuilders to provide what the new housing market demanded -- high-quality low-cost housing.⁹⁸

In the postwar era, the Federal Housing Administration began to play a dominant role in determining the appearance of houses and neighborhoods. FHA building and planning standards, which were designed to protect property values, effectively controlled every aspect of residential development, including construction techniques, building materials, design and layout of houses, minimum square footage requirements, as well as the layout and appearance of the subdivision. In fact, subdivision design was considered as important to long-term stability of a property's value as construction of the house itself. The FHA had been encouraging good design in residential neighborhoods since the 1930s. Neighborhood planning was a relatively new idea at the time, but since the 1920s, subdivision developers had increasingly been assuming the role of planners of suburban America. Engineers and architects designed the layout of streets and lots, and established building guidelines, setback requirements, easements, and other restrictions, many of which could be incorporated into deed restrictions. FHA design standards encouraged the careful arrangement of lots and streets to protect the subdivision from commercial encroachment and discourage through traffic. Pamphlets on subdivision design urged developers to avoid a gridiron layout of streets by using curved streets, corners, cul-de-sacs and courts, and to set aside sites for schools and churches. The FHA enforced a standard of quality construction and uniformity of appearance, based on the principle that a house located in a an aesthetically pleasing community was a marketable product and a good mortgage risk. This encouraged more efficient production of housing to bring down prices; it also forced builders to comply with the guidelines, as mortgage insurance would be denied on properties located in subdivisions which

⁹⁷ TDN, 20 Dec 1947, and various dates, 1947-1951; Gammage, pp. 16-18.

⁹⁸ Hunter, pp. 160-161; Clark, pp. 194-195, 221-222; *Historic Homes of Phoenix: An Architectural and Preservation Guide* (City of Phoenix and Cooper/Roberts Architects, AIA, 1992), pp. 101-102; Wright, p. 251-253.

failed to meet development standards. By the early 1950s, government-financed programs made it very profitable for developers to build large tracts of identical houses.⁹⁹

The emerging residential architecture of the postwar era was influenced by earlier designs, particularly European avant-garde and Frank Lloyd Wright's low, horizontal houses. However, the FHA favored traditional architecture. Modern designs, which were considered a passing fad, and thus, a high risk, received low ratings, making them ineligible for mortgage insurance. Nonetheless, modern design was slowly incorporated into the two dominant styles of American homes -- Ranch and International.¹⁰⁰

The predominant residential architectural style of the postwar period is the Ranch Style. Originating in California in the 1930s, this style combined elements of the indigenous rural ranch house, the Craftsman Bungalow, and Frank Lloyd Wright's early prairie house. It typically featured a low-pitched roof with deep eaves, a low horizontal profile, and traditional elements such as clapboard, shutters, and a front porch. Richard Neutra and Gregory Ain were among the most influential California architects designing Ranch houses. The style was popular, and was seen as being modern, unpretentious, and the embodiment of the informal lifestyle of sunny California. It was also simple and inexpensive to build. The California Ranch house was soon being built all across country. By the early '50s, the Ranch Style was the standard design for most tract and custom homes. The typical Ranch house has one story with a rectangular or L-shaped plan and a low-pitched roof. It is sparsely adorned, and usually has no true porch, but rather, a simple extended eave over the entry. Decorative elements are often limited to ornate iron porch posts or wood shutters. The wide side of house faces the street, which along with the low-pitched roof and many visible planes and angles, creates a bigger, more spacious look for a small house. More than any other style, the Ranch house seemed to reflect the new family lifestyle -- simple and informal.¹⁰¹

The International, or Contemporary Style, was more influenced by modern design. In large buildings, the International Style often incorporates steel, concrete, and glass to emphasize the externally visible structure of the building; in residential design, the style is simplified, and construction is often similar to the Ranch house. The International Style house typically has one story with a flat roof and a low profile, and may include the use of geometric shapes and cantilevered overhangs.¹⁰²

⁹⁹ Marc A. Weiss, "The Rise of the Community Builders: The American Real Estate Industry and Urban Land Planning," in Barbara M. Kelly (ed.), *Suburbia Re-examined* (New York: Greenwood Press, 1989), pp. 146-147, 150; Collins, pp. 362-364; Martin, p. 30; Wright, p. 248; Federal Housing Administration, "Planning Neighborhoods for Small Houses," Technical Bulletin No. 5 (Washington: Government Printing Office, 1936) and "Planning Profitable Neighborhoods," Technical Bulletin No. 7 (Washington: Government Printing Office, 1938).

¹⁰⁰ Wright, p. 251; Martin, p. 30, 35; Thomas Hine, *Populuxe* (New York: Alfred A. Knopf, 1986), pp. 46-48.

¹⁰¹ Hunter, pp. 166-168; Clark, pp. 211, 221, 228; *Historic Homes of Phoenix*, pp. 102-104; Virginia and Lee McAlester, *A Field Guide to American Houses* (New York: Alfred A. Knopf, 1989), pp. 477, 479; Hine, pp. 48-50; Wright, p. 251; Martin, pp. 39-41.

¹⁰² Martin, pp. 2, 42-43; *Historic Homes of Phoenix*, pp. 115-116.

An important characteristic of both Ranch and International styles is the innovative use of interior space. The open plan, first introduced in Frank Lloyd Wright's Usonian designs, makes use of continuous interior spaces and indirect lighting to create an informal and open atmosphere. In the 1940s, architects began combining the dining room with the kitchen or living room, using open spaces instead of walls between the different living areas. This flexibility in the arrangement of interior space led to a functional open plan, with central access to all rooms. The layout was quite compatible with the new lifestyle of the postwar period, with its emphasis on family life, the television, and casual entertaining with cocktail and dinner parties. The modern plan also added a utility or laundry room, and multi-use rooms. The family room became a standard feature in most new homes about 1955; by 1960, it tended to be the center of activity in the home, and the living room became more of a traditional formal room. Kitchens became larger, sometimes large enough for an informal eat-in area, and there were lots of cupboards and closets for storage. New technology also contributed to changes to the interior environment. With the increased use of central air conditioning and heating, high ceilings were no longer necessary, and eight feet became the standard ceiling height. The lessened need for ventilation, along with improvements in indoor lighting, allowed the use of fewer and smaller windows, particularly on the front of the house. However, floor-to-ceiling glass was also incorporated into the design. Large glass windows and doors often separated the living room from the back patio, extending the living area into the back yard. The new look of the house from the inside was large part of the appeal of the modern style.¹⁰³

After several years of frenzied construction, the critical demand for housing was finally met by about 1950. Residential development started slowing in the early 1950s, but with a growing population and the rising prosperity of middle-class America, there was still a potentially strong market for new homes. By the mid-1950s, the homebuilding industry had become very competitive. Builders had to increase the appeal of their products to attract buyers, and most tract houses were now being designed by architects. The Housing Act of 1954 recognized the changes in the market, and lowered the amount of down payment required for houses costing up to \$25,000. This made it possible to finance larger houses. In the late 1950s, houses generally became larger and more richly decorated. Builders started offering a greater variety of different models, with more optional features. They also began using a more flexible approach to stylistic design, mixing traditional and modern elements in their houses. By 1960, there was much greater diversity in residential architecture, a stark contrast to the small, uniform houses that had been produced ten years earlier.¹⁰⁴

Commercial development started expanding immediately after World War II, though not at the same urgent pace as residential construction. Initially, retail development followed the familiar pattern that had always shaped Tempe's business community -- new freestanding stores, ranging in size from 300 to 6,000 square feet, were built along Mill Avenue, extending the downtown district to the south as far as 8th Street (University Drive). Stylistically, the new buildings were

¹⁰³ Clark, pp. 198, 203, 220; Hunter, p. 82; Wright, p. 254; Hine, pp. 55-56; Annamarie Adams, "The Eichler Home: Intention and Experience in Postwar Suburbia," in Elizabeth Collins Cromley and Carter L. Hudgins (eds.), *Gender, Class, and Shelter* (Knoxville: University of Tennessee Press, 1995) pp. 168-170.

¹⁰⁴ Martin, pp. 8, 38-39, 59; Hine, pp. 45-46, 52; Adams, pp. 165, 167; Cole, pp. 284-309.

fairly simple in design, in contrast to the Spanish Colonial theme that dominated upper Mill Avenue. After the war, the Commercial Box Style was commonly seen in the design of everything from small retail stores and service stations to supermarkets. Box-like rectangular buildings were usually plain and sparsely ornamented. They were usually of concrete block construction, with a flat roof, and stores often had glass fronts or large horizontal bands of windows. Simple decorative detailing that was often used in Tempe storefronts included bands of brick, terra cotta, glazed ceramic tile, and glass block.¹⁰⁵

The appearance of drive-in markets and other automobile-oriented retail outlets in the 1920s began a radical transformation of American business. The automobile made it possible to move commercial development outside of the city center. By combining a variety of separate related stores -- grocery, meat market, and bakery -- in one location, drive-in markets offered customers fast and convenient shopping. As off-street parking was a key design consideration, the building was set back from the property line and laid out around a paved forecourt. The success of this approach led to the development of supermarkets and shopping centers. The supermarket combined all food related stores in one building; the shopping center provided a wider variety of different goods and services. In the 1940s, small neighborhood shopping centers, generally with fewer than 20 units, were being built throughout the country.¹⁰⁶

In the mid 1950s, the linear development of Tempe's commercial district came to an abrupt halt as new retail development embraced the automobile-oriented approach to marketing. Safeway opened the first supermarket in Tempe in 1951. The 17,500-square foot store created a whole new environment for shoppers, not just in the size of the building and the range of products that it stocked, but in all of its other modern features: fluorescent lights, air conditioning, eight checkstands, and paved off-street parking for 160 cars. The more ambitious shopping center concept was realized in Tempe in 1956 with the completion of the A. J. Bayless Supermarket and Shopping Center and Tempe Center. Both were built around a centrally located supermarket surrounded by smaller stores offering everything from drugs, clothing, and hardware to personal services such as barber and beauty shops and laundromats. And both had expansive parking lots. The A. J. Bayless development, at 45,000 square feet of total retail space, was fairly small. Tempe Center was much larger, with 118,000 square feet of space for more than twenty individual stores arranged in an L-shaped structure. Tempe Center was designed by Victor Gruen, a prominent California architect who was renowned for his design of modern shopping centers and malls. While the structure is fairly plain, and does not exhibit some of the bold design elements that are often associated with Gruen's work, Tempe Center does represent the scale, layout, and visual appeal that characterized modern automobile-dependent marketing.¹⁰⁷

¹⁰⁵ Richard Longstreth, *The Buildings of Main Street* (Washington, D.C.: Preservation Press, 1987), pp. 68, 126; Liebs, pp. 108-110, 130-132; TDN, 6 Feb, 31 Aug 1946, 19 Mar, 23 Apr, 25 Jun, 2 Sep, 20 Dec 1947, 2 Oct, 4 Dec 1948, 24 Feb, 20, 21 Jun, 16 Aug 1949, 10 Feb, 16 Mar, 21, 23 Jun 1950, 29 Jan 1951.

¹⁰⁶ Richard Longstreth, "Innovation Without Paradigm; The Many Creators of the Drive-in Market," in Thomas Carter (ed.), *Images of an American Land; Vernacular Architecture in the Western United States* (Albuquerque: University of New Mexico Press, 1997), pp. 231-238.

¹⁰⁷ TDN, 9 Sep 1950, 11, 17 Jan, 7 Jul 1951, 13 Jan, 5 Feb, 14 Jul, 17 Oct, 15, 17 Nov, 14 Dec 1955, 21, 28 Jan, 2 Feb, 22 Mar, 4, 27 Apr, 30 Aug 1956, 7 Aug 1957, 21 Jan 1958; Liebs, pp. 30-31, 132.

IV. SURVEY RESULTS

AREAS OF SIGNIFICANCE AND RELATED THEMES

Community Planning and Development

Resources associated with the post-World War II era in Tempe demonstrate patterns of community growth during a critical time in the city's development. While new construction activity was seen throughout postwar America, few communities experienced the vigorous rate of development that was taking place in Tempe and other Valley cities. New manufacturing industries, the growth of Arizona State University, and Arizona's rising reputation as a clean, modern, snow-free oasis attracted thousands of new residents. The availability of land and the absence of geographic barriers allowed for the fairly orderly growth of the city outward.

Suburban planning in postwar Tempe was largely the domain of the developers and builders. Great care went into design of their subdivisions, for the trend in marketing of housing was not just to sell a house, but the neighborhood as well. Neighborhood design tended to follow FHA guidelines for subdivisions, included siting of desirable or compatible activities, such as schools, churches, and parks, within or adjacent to residential areas, and carefully excluded all commercial development from neighborhoods. Plats for residential subdivisions often included lots planned for commercial development, but these were always located on the perimeter, facing outward toward main arterial streets. With this arrangement, commercial strips were more buffers to traffic and noise than encroachments into residential areas. Neighborhoods, on the other, faced inward, with offset or curved streets and cul-de-sacs that kept automobile traffic in its place -- outside of the residential areas.

The convenience of the automobile and the availability of land encouraged sprawl away from the traditional center of the city. However, another adaptation to the explosive population growth of Tempe was the beginning of a trend toward higher density development in both single-family and multi-family housing. In the late 1940s, local contractors began developing small residential tracts by purchasing several large lots in an existing subdivision and resubdividing the property. These resubdivisions usually created a cul-de-sac with twice as many home sites. The emergence of multi-family housing shows a much more pronounced increase in density. Duplexes and small apartment blocks were typically built in the late 1940s; by the late 1950s, large two-story and multi-building apartment complexes were being constructed, usually concentrated in areas developed specifically for high-density housing.

Rapid population growth and the influence of the automobile had a profound impact on the physical development of the community during the post-World War II period. In earlier periods, the growth of the city could be seen manifest in certain streets and blocks; but in the post-war period, urban growth is a phenomenon expressed more in terms of square miles. The unprecedented scale and rate of development in the late 1940s and 1950s largely defined the community that exists in Tempe today.

Federal Housing Policy

Many Tempe Subdivisions exhibit characteristics which demonstrate the influence of the Federal Housing Administration and federal housing legislation in the late 1940s and 1950s. Builders strictly conformed to FHA building and planning standards that determined every aspect of residential development, including construction techniques and materials, architectural design, and layout of the subdivision. This influence can be seen in the conformity of neighborhoods of the early 1950s, where all houses are nearly identical, and in the subdivisions of the late '50s, when larger more elaborately decorated houses, and more stylistic diversity allowed within a neighborhood was permitted. It can also be seen in the design of subdivisions, with arrangements of lots and streets which discourage traffic and commercial encroachment, and incorporate more desirable community amenities.

Builders and Developers

Throughout the post-World War II period, 1946-1960, there were several builders and developers that played an instrumental role in shaping the physical growth and development of Tempe. Many, such as Herman Goldman, Karl S. Guelich, Harl Chamberlain, and Norman McKinley, began their building careers as carpenters or general contractors and eventually expanded their business activities to become subdivision developers. There were also medium-sized firms, such as Darrow-Loftfield Construction Company and Siesta Homes, that built a substantial portion of the homes built in Tempe in the 1950s. One developer, Del E. Webb, gained national prominence. While the construction of Campus Homes was relatively early in his career, the successful builder went on to develop the first retirement communities, and many large-scale residential and commercial projects throughout the West. For a full listing of individuals and firms that were active in the development of Tempe after World War II. see Appendix C -- Builders, Developers, and Architects.

Education

In response to Tempe's sudden surge in population, new public elementary and high schools and church-affiliated schools were quickly built in the midst of the new neighborhoods being developed to the east, west, and south. The post-war period also brought the unprecedented expansion of Arizona State College, as rising student enrollment paralleled the growth of the city. New construction extended the college campus to the north and south; after achieving recognition as Arizona State University in 1958, expansion began pushing to the east. However, this growth was costly for both the university and the community. Residential development had outpaced the university's land acquisition program, and expansion required demolition of several established neighborhoods, marking the advent of the first large-scale redevelopment projects in Tempe. The construction of specialized classroom buildings and high-density student housing reflects the academic development of the university, with its diversified programs and colleges, and ASU's emergence as a leading university. Particularly significant is the placement of Sun Devil Stadium near the center of the original townsite, demonstrating the increasingly important role of collegiate sports in defining the identity of both the university and the community.

The planning and construction of educational buildings in Tempe is closely associated with local architect Kemper Goodwin, who designed all public schools and most university buildings between 1946 and 1960. As a result, all elementary and high school campuses of the period share a common layout and appearance. Goodwin's International Style-inspired designs include long narrow blocks of classrooms of brick construction, with large horizontal bands of steel casement and awning windows and low-pitched roofs. The separate wings are joined with a series of interconnecting breezeways, creating a unified campus setting. Likewise, Goodwin's influence can clearly be seen in the International Style classroom buildings and dormitories he designed at Arizona State University. His distinctive designs in brick, concrete, and glass provide a unified appearance in areas of the campus that were developed before the university formally adopted standard design guidelines. Other architects that had an impact on the design of Arizona State University during this period include Lescher and Mahoney, Ralph Haver, and Edward L. Varney.

Commerce/Tourism

New national marketing trends and the rapid ascent of the automobile as the predominant mode of travel quickly began transforming Tempe's business environment after World War II. To stay competitive, merchants had to offer what customers really wanted -- variety and convenience. This led to the development of progressively larger retail outlets with ample off-street parking. New types of commercial structures were introduced in Tempe during the postwar period, including the supermarket, which combined several different retail services in one building, and the shopping center, which incorporated a variety of independent stores into one structure. Widespread reliance on the automobile brought an immediate decentralization of retail activity; prime commercial sites could be located on any major street in the proximity of new subdivisions.

Before World War II, automobile-dependent businesses such as motels and service stations were built along the Tempe Mesa Highway. This type of travel-related development continued after the war, but tourism never grew to extent that it had a significant impact on the local economy.

Unfortunately, resources of this period of commercial development are not well represented in Tempe today. Redevelopment of downtown Tempe over the past two decades has led to the loss of nearly all commercial properties that had been built on Mill Avenue between 1946 and 1955. Expansion of Arizona State University campus in the 1950s and '60s resulted in the loss of many postwar motels, most of which had been located on Apache Boulevard, between Mill Avenue and Rural Road. Most of the small individual commercial buildings that were built along Apache Boulevard have been lost due to demolition for small-scale redevelopment or severe loss of integrity. The Apache Boulevard Redevelopment Project and the Central Phoenix/East Valley Light Rail Transit Project will undoubtedly have more impact on the remaining commercial properties along the corridor.

Industry

After World War II, Tempe began to gradually move away from its dependence on agriculture to develop a broader-based economy that included light manufacturing and electronics fabrication. Some new industry was directly related to residential growth, such as the manufacture of construction materials and the erection of new power plants. Most industrial activity was concentration in two industrial parks, the Phoenix-Tempe Industrial Area and the Kyrene Road corridor. These large tracts were favored because they were fairly isolated from neighborhoods and had good access to utilities and shipping facilities. By the 1960s, rapidly progressing residential development had quickly consumed all available land, and future industrial development was essentially limited to the industrial areas that had been established in 1950s, and to vacant parcels along the Salt riverbed and freeways.

RESIDENTIAL ARCHITECTURE

Many local contractors were building houses in Tempe In the late 1940s. They produced custom homes of various sizes, using a wide range of construction materials, including concrete block, brick, stone, wood, and stucco. Some builders incorporated their own distinctive design elements in their houses. Post-war neighborhoods appeared to reflect a degree of stylistic diversity, but this was an illusion created by relatively minor design details, for all new homes in Tempe exhibited the characteristic features of the Ranch Style. Virtually all houses of the late 1940s were one story structures built on a concrete slab foundation. They typically had a long rectangular or L-shaped plan, with a simple gable or hip roof. A few notable subtypes of the style -- California Ranch, Spanish Colonial Ranch, American Colonial Ranch, and French Provincial Ranch -- influenced the design of homes in Tempe, but in most cases, these houses were stripped down interpretations, lacking many of the characteristic decorative elements of the style.

By 1950, a few builders came to dominate the housing market in Tempe. Herman Goldman, Karl S. Guelich, and Harl Chamberlain, in particular, were quite effective at applying techniques of mass-production to homebuilding. The houses that they produced tended to be stark and featureless, consisting of little more than plain block walls, casement windows, and a roof. Nearly all were constructed of concrete block, often using a locally produced type of lightweight pumice block. These Ranch houses general had no true porch; instead, a broad overhanging eave, with or without porch posts, extended over the entry. A carport attached to the side was a standard feature on all houses built after 1950. As all new houses tended to be nearly identical in size and style, the new subdivisions easily obtained FHA approval for guaranteed loans.

By this time the International Style began appearing in residential design in Tempe. The earliest examples of this style tend to be small homes with a square or rectangular plan and a flat roof. Various contractors were also building a distinctive type of National Folk house with a pyramidal hip roof. While these two alternatives to the Ranch Style created a sense of variation in neighborhoods, they were still very similar to Ranch in construction, with concrete block masonry, casement windows, and attached carport.

The growth of the university and an increasingly diversified economy lead several large Phoenix-based construction companies to enter Tempe's expanding housing market in the 1950s. Builders such as Darrow-Loftfield, Del Webb, and Siesta Homes developed large residential tracts in Tempe. These companies generally followed a highly standardized approach in both production and marketing of housing. All homes were similar in size and construction. The typical house had three-bedrooms, two bathrooms, a family room, and a built-in range and oven, and sold for less than \$10,000. During this time, many established local builders become subdivision developers in their own right, buying parcels of land, laying out neighborhoods, building and selling homes. Harl Chamberlain and Karl Guelich developed subdivisions with low and moderate priced homes, while Herman Goldman and the Agnew Construction Company planned smaller tracts with large sprawling custom homes selling for two to three times the typical Tempe home.

The growing number of developers that were active in Tempe created a very competitive housing market. By the mid-1950s, builders began turning to more decorative and varied designs to attract buyers. The resulting architectural changes seem to reflect two apparently contradictory goals: homebuilders began offering a greater variety of different models, trying to avoid the monotonous repetition that characterized many earlier subdivisions; at the same time, they began incorporating rather proprietary decorative details into all of their houses, either to create a distinctive theme for a neighborhood, or to serve as the stylistic signature of the builder. The Del Webb Construction Company was one of the first developers to apply these practices in Tempe. The company offered homes in both Ranch and International styles in its Campus Homes subdivision. While all houses had same basic plan and construction, each looked visually different due to varying combinations of different roof types and arrangements of windows. However a common unifying theme is seen throughout the neighborhood in the repeated use of large wood fixed-sash windows with nine lights. Norman McKinley, the Tempe-based developer of University Homes, created stylistic variety in his homes by combining different plans with many distinct roof types. Siesta Homes initially used a very standardized plan and elevation in Carlson Park, the first of many subdivisions that it would build in Tempe. The company offered a greater variety of models in later subdivisions, but the distinctive small porch with a brick wainscot that can be seen throughout Carlson Park became a standard feature that would continue to be associated with Siesta Homes. The company also experimented with the use of gables to create varied roof lines; by moving the gables down into the eaves, they became dormers. Chaletesque dormers also became a trademark decorative element for Siesta Homes; these small peaked hoods over windows, with brackets and decorative fascia, are found singly or in pairs throughout Parkside Manor.

Ranch Style houses of the late 1950s are rich in subtle details. Brick wainscots, scroll-cut fascia, board-and-batten siding, and decorative wrought iron porch posts can be seen in nearly every subdivision established after 1957. As more builders began their first Tempe subdivisions, they added their own distinctive embellishments. Gene Hancock, developer of Cavalier Hills, made extensive use of weeping mortar and wood siding to create contrasting textures. Phillip Savittieri and Sons (P & S Construction Company) used different types of natural wood and brick to provide unique decorative accents for each house in Lindon Park.

The Knoell Brothers Construction Company was perhaps the most innovative homebuilder of the late '50s. When Hughes Acres opened in 1959, it was the first subdivision in Tempe to offer aluminum frame windows and an attached garage as standard features on all models. And unlike carports, which are almost always attached to the side of the house, the garage on a Knoell home is pushed closer to the street and prominently placed in a gable end. The front entry is usually set back into the juncture of the house and garage. By 1960, most Tempe developers were incorporating aluminum windows and garages into their new homes.

There are two particularly noteworthy individual properties that appear to be the earliest examples of architectural styles that would become popular in 1960s. The survey includes a Neo-Spanish Colonial house, with an open arched entry leading to an enclosed front patio, which was built in Broadmor Estates in 1960, and a Split-level house that was built in Shalimar Estates in 1960 or 1962.

The architectural record of Tempe demonstrates how alternating trends between uniformity and variation in design shaped residential development during the post-World War II period, 1946-1960. Strongly influenced by FHA design standards and changing popular tastes, Ranch Style architecture evolved from its earliest forms in the 1940s, to the small, unadorned houses of early '50s, and to the larger and richly decorated homes of the late 50s. Homes in Tempe provide a broad representation of popular residential architecture of the period.

Architectural Styles

Ranch

- One story
- Elongated rectangular or L-shaped plan with the broad side facing the street
- Typically of concrete block masonry construction; some early examples were built of brick or frame and stucco
- Many different roof types, including gable, hip, or intersecting gables and/or hips; all roof types are low-pitched with overhanging eaves
- Steel casement windows with no trim; fixed and sliding aluminum frame windows were introduced in 1959
- Minimal porch, usually in the form of an extended eave, with or without posts
- Attached carport or garage
- Houses built before 1958 have few or no decorative elements; wood shutters and weeping mortar are occasionally seen
- Houses built in the late 1950s show a greater range of decorative elements, including brick wainscoting, board-and-batten siding, scroll-cut decorative fascia, and chaletesque dormers
- Ranch is the predominant style in almost every subdivision in Tempe

Transitional/Early Ranch

- One story
- Small box-like form with an L-shaped plan
- Usually of brick masonry construction
- Low-pitched gable or hip roof
- Small porch over the entry at the juncture of the two wings
- Small-paned steel casement windows
- Often horizontal wood siding on the gable ends
- The Transitional/Early Ranch Style is generally associated with an earlier period, but a few late examples are found in Borden Homes and University Park

California Ranch

- One story
- Elongated L-shaped plan with the broad side facing the street
- Usually of concrete block masonry construction
- Low-pitched cross-gabled roof with overhanging eaves and wood or asphalt shingles
- Steel casement windows, occasionally with wood trim or diamond panes
- Minimal porch, usually an extended eave, with or without posts, over the entry at the juncture of the two wings
- Attached carport or garage
- Houses built before 1958 have few or no decorative elements; wood shutters and weeping mortar are occasionally seen
- Houses built in the late 1950s show a greater range of decorative elements, including brick wainscoting, board-and-batten siding, and scroll-cut decorative fascia
- A few early California Ranch houses were built in University Estates; later examples of the style are found in University Homes, Papago Parkway, Cavalier Hills, D Bar L Ranchos, Tempe Estates, and Lindon Park.

Spanish Colonial Ranch

- One story
- Elongated rectangular or L-shaped plan with the broad side facing the street
- Low-pitched gable or cross-gabled roof with red tile
- White stuccoed walls
- Arched openings
- Steel casement windows
- Usually has an attached carport or garage
- A few Spanish Colonial Ranch houses are found in University Park

American Colonial Ranch

- One story
- Rectangular or L-shaped plan
- Usually of concrete block or brick masonry construction
- Low-pitched gable roof
- Classical moldings on cornices, window and door openings
- Often horizontal wood siding on the gable ends
- Steel casement windows with wood shutters
- Simple masonry chimney
- Often has attached carport
- A few American Colonial Ranch houses are found in Borden Homes and Val Verde

French Provincial Ranch

- One story
- L-shaped or irregular plan
- Usually of concrete block masonry construction
- Mostly defined by a low- to medium-pitched multiple hip roof; asphalt or wood shingles
- Tall casement windows, often with wood shutters
- Small porch with decorative wood or iron posts
- Attached carport
- French Provincial Ranch houses are found throughout Tempe, particularly in University Park and Broadmor Manor

National Folk Ranch

- One story
- Square plan
- Concrete block masonry construction
- Low-pitched pyramidal hip roof with overhanging eaves; later examples have front-gabled roof
- Steel casement windows with no trim
- Small entry porch, veranda, or extended eave
- Usually has an attached carport
- Construction and general appearance is similar to neighboring Ranch Style houses
- National Folk Ranch houses are found in Tomlinson Estates, State College Homes, Val Verde, Lindon Park, and Papago Parkway.

International

- One story
- Rectangular, square, or irregular plan with the broad side facing street
- Low, angular box-like massing
- Concrete block, brick, or concrete lift-slab construction; exterior walls are sometimes stuccoed
- Flat roof, usually with overhanging eaves; a few examples have parapets
- Small-paned steel casement windows
- Few or no decorative elements
- International Style houses are found throughout Tempe; the style is fairly common in Campus Homes, Tempe Terrace, Willacker Homes, and Broadmor Vista

National Folk

- One story
- Rectangular or square plan
- Box-like massing with symmetrical façade
- Wood frame construction with clapboard siding or stucco
- Low-or medium-pitched gable or hip roof; wood or asphalt shingles
- Wood double-hung or steel casement windows
- Front porch with hip, shed or gable roof
- Flat board or simple molded trim with little or no ornamentation
- National Folk houses are found throughout Tempe

TYPES AND DISTRIBUTION OF RESOURCES

The initial reconnaissance survey examined approximately 4,500 properties built in Tempe between 1946 and 1960. All properties that were found to have a high level of integrity or a high level of significance were included in the survey inventory, which lists 1,774 resources.

Types of Resources

- Residential Subdivisions
 - Owner-built house
 - Custom-built house
 - Subdivision tract house
 - Duplex
 - Apartment building
 - Pre-fabricated house
 - Residential Irrigation System
- Commercial Business Districts
 - Retail store
 - Shopping center
- Industrial Districts
 - Factory
 - Packing plant
 - Power plant
- Public/Semi-public Buildings
 - Church
 - Elementary School
 - High School
 - College/University
 - Classroom building
 - Office building
 - Student union
 - Stadium
 - Fraternal Lodge
- Highway-Related Businesses
 - Service station
 - Motel
- Defense related Buildings
 - Armory

Areas of Development

Almost all new construction between 1946 and 1960 was located in new subdivisions. There was some in-fill development within a few early subdivisions, such as Gage Addition, Park Tract, and Farmers Addition. Some isolated properties, usually commercial buildings, were located along Apache Boulevard and other arterial streets. Industrial development was concentrated in two areas -- the Kyrene Road corridor and the Phoenix-Tempe Industrial Center.

Residential Subdivisions

Residential Subdivisions have well defined boundaries, integral features, and unique historical associations -- attributes that lend themselves well to the consideration of subdivisions as historic districts. For the purposes of this study, a subdivision is the original subdivision plus any additions later filed by on behalf of the primary developer. A subdivision is also a neighborhood that is usually associated with one homebuilder. A subdivision is composed not just of homes, but includes the arrangement of streets and cul-de-sacs, residential irrigation systems, schools, churches, and parks.

Tempe's post-World War II subdivisions are concentrated in the areas south, southwest, and west of Arizona State University and downtown Tempe (sections 16, 21, 22, 27); along both sides of Apache Boulevard, east of Rural Road (sections 23 and 24); and north of the Salt River (sections 3, 10, and 11).

The survey inventory includes 1646 single-family detached houses and duplexes located in 61 subdivisions. The chart below shows the general distribution of residential architectural styles in Tempe.

Ranch		94%
Basic Ranch	80%	
California Ranch	7%	
French Provincial Ranch	3%	
National Folk Ranch	2%	
All other Ranch subtypes	1%	
International		4%
National Folk		2%

Also listed in the survey are 50 apartment buildings. Twenty of the apartments are located on Granada Drive, the main street in the Sunset Vista subdivision, which is a unique multi-family neighborhood. Other smaller concentrations of apartments are found along College Avenue, Spence Avenue, and Broadway Road.

Non-Residential Resources

The following non-residential resources are listed in the survey:

- 22 buildings on the Arizona State University campus, including classroom buildings, dormitories, a student union, a chapel, and a stadium
- 2 shopping centers
- 16 individual commercial properties, mostly along Apache Boulevard
- 7 industrial structures, including 2 power plants
- 11 churches
- 9 schools
- 3 residential irrigation systems

INTEGRITY OF RESOURCES

Overall, there is very high level of architectural integrity seen in both individual properties and subdivisions in most areas of Tempe. Relatively minor loss of integrity in individual houses was seen to some degree in all residential subdivisions in Tempe. There are three common types of alterations, additions, and repairs that were observed:

- In-fill of the carport to expand interior space, which was noted in virtually every subdivision, but is particularly prevalent in Campus Homes, Hudson Manor, Lee Park, and Transmission Terrace
- Paint over the brick wainscot, which is one of the most visible character-defining features of homes in Papago Parkway, Carlson Park, Hudson Park, Parkside Manor, and Nu-Vista
- Replacement of steel casement windows with aluminum sliding windows, which is seen to some extent in most neighborhoods

Other less frequent alterations that were noted include stucco, vinyl siding, or other sheathing over block walls, changes in roof lines, and the addition of porches or verandas.

During the course of this study, only those properties which exhibit a high level of architectural integrity (i.e., with few or no alterations) were inventoried. A statistical analysis of this inventory provided a means of assessing which neighborhoods possess the highest level of integrity. Subdivisions were rated high or medium on the basis of the percentage of homes that still possess all elements of their original design; only subdivisions that show serious problems with loss of integrity, deterioration, and commercial or high-density encroachment were rated low. This evaluation tends to favor neighborhoods that have changed relatively little since their construction; however, this is a much higher standard than National Register guidelines require. With very few exceptions, almost all postwar subdivisions in Tempe possess the level of integrity required for eligibility as an historic district.

THREATS TO RESOURCES

External Threats

- Expansion of the Arizona State University campus
- Apache Boulevard Redevelopment Project
- Central Phoenix/East Valley Light Rail Transit Project
- Encroachment of Commercial development into neighborhoods
- Encroachment Multi-family housing into neighborhoods
- Neighborhoods that are most vulnerable to external threats tend to be in areas west of downtown Tempe (section 16) and east of Rural Road (sections 23 and 24)

Internal Threats

- Lack of maintenance
- Inappropriate remodeling and repair
- Insensitive in-fill construction on vacant lots
- Poverty, crime and social problems
- All areas of Tempe face internal threats to some degree, but neighborhoods that are most likely to be adversely impacted are concentrated in sections 16, 23, 24, and 11 (North Tempe).

V. RECOMMENDATIONS

RESIDENTIAL SUBDIVISIONS

Subdivisions Currently Eligible as Historic Districts

Seven subdivisions should be considered for nomination to the National Register of Historic Places as historic districts. Each of these subdivisions have some significant historical associations. Most or all of the houses in these neighborhoods were built before 1950, and most of the houses, as well as the subdivisions themselves, exhibit a fairly high level of integrity. There are currently no historic districts in Tempe. Obtaining historic district status for these subdivisions would provide recognition and protection of all of the earliest residential areas in the city that still convey their historic appearance and sense of place.

- Borden Homes
- College View
- Gage Addition
- Goodwin Homes
- Park Tract
- Roosevelt Addition
- University Park

Subdivisions That Will Become Eligible as Historic Districts in the Next Ten Years

Resources generally must be at least fifty years old to attain historic significance. Most of the properties surveyed for this study were built after 1951, and so, are not yet eligible due to age. Twenty-four subdivisions should be considered for nomination to the National Register of Historic Places as historic districts at the appropriate time, when most of the properties are at least fifty years old.. Each of these subdivisions have some significant historical associations. Most or all of the houses in these neighborhoods were built between 1950 and 1960, and most of the houses, as well as the subdivisions themselves, exhibit a fairly high level of integrity.

- Broadmor Manor
- Broadmor Vista
- Campus Homes
- Carlson Park
- Cavalier Hills
- D Bar L Ranchos
- Date Palm Manor
- Hudson Manor
- Hudson Park
- Hughes Acres
- Laird Estates
- Mitchell's Subdivisions
- NuVista
- Papago Parkway
- Parkside Manor
- Sunset Vista
- Tempe Estates
- Tempe Terrace
- Tomlinson Estates
- University Estates
- University Heights
- University Homes
- University Terrace
- Willacker Homes

Subdivisions Requiring Further Study and Evaluation

There are nine subdivisions that are of some historic and architectural interest, but may convey only marginal significance and/or exhibit some integrity problems. These neighborhoods should be considered for further study and evaluation. They may have individually significant properties that should be considered for inclusion in an amended Tempe Multiple Resource Area nomination.

- B-H Homes
- Campo Alegre
- Hu-Esta Park
- Lee Park
- North Tempe
- State College Homes
- Tempe Heights
- Transmission Terrace
- Val Verde

Rural Subdivisions Requiring Further Study and Evaluation

There are four rural subdivisions in Tempe that represent a unique aspect of the city's growth. They include some of the few remaining tracts of the postwar community that were not associated with a single homebuilder or developer. These neighborhoods exhibit a remarkably diverse historic streetscape that includes owner built-housing and custom homes built by many different contractors, with great variety in size, construction, and style. However, these neighborhoods face serious internal and external threats. Many of the resources within them have experienced significant loss of architectural integrity. Typical adverse conditions include deterioration, neglect, vacant buildings and lots, and inappropriate in-fill development. The continued physical decline of these areas will ultimately leave these subdivisions vulnerable to rezoning, commercial encroachment, and large-scale redevelopment. These neighborhoods should be considered for further study and evaluation. They may have individually significant properties that should be considered for inclusion in an amended Tempe Multiple Resource Area nomination.

- Buena Park
- Jen Tilly Terrace
- Rancho El Dorado
- Victory Acres

Subdivisions Not Eligible as Historic Districts

There are nine postwar subdivisions that were found to be ineligible for National Register status due to lack of historic significance and architectural integrity. Underlying problems include widespread home remodeling and alteration, demolition of resources, redevelopment, and inappropriate in-fill development. However, these subdivisions may have individually significant properties that should be considered for inclusion in an amended Tempe Multiple Resource Area nomination.

- Bowen Place
- Broadmor Annex
- Farmers Addition
- Fruitland Farms
- Lola Vista
- Orth Subdivision
- Randall Terrace
- Vista del Rio
- Zella Vista

Subdivisions Associated With a Later Period

Nine subdivisions were established in the late 1950s or in 1960, but were built out in the early 1960s. They should be reexamined at a later date.

- Broadmor Estates
- Lindon Park
- Margo Manor
- Marilyn Ann
- Palmcroft Manor
- Polley Ann
- Shalimar Estates
- Western Village
- Westgate

NON-RESIDENTIAL PROPERTIES

Arizona State University

Most of the Arizona State University that were surveyed would qualify as individually significant properties that might be considered for inclusion in an amended Tempe Multiple Resource Area nomination. However, it is recommended that an Arizona State University Historic District be created, as proposed in the 1997 Tempe Multiple Resource Area Update. At this time, nearly all buildings in the central part of the campus, between Forest Mall and Palm Walk, are now at least fifty years old. This area includes all university buildings that were built before 1951. Such a district could later incorporate the Adelphi housing area south of Apache Boulevard and east of McAllister Avenue, which was established in the mid-1950s.

Commercial Buildings

Most of the commercial properties identified in the survey are ineligible for National Register status due to marginal significance and/or integrity. The exceptions are two shopping centers -- the A. J. Bayless Supermarket and Shopping Center and Tempe Center -- which represent very significant aspects of Tempe's commercial development. However, the Bayless Shopping Center has been substantially altered, and Tempe Center is slated for demolition in the near future. Nonetheless, the Bayless Shopping Center should be considered for further study and evaluation, and possible inclusion in an amended Tempe Multiple Resource Area nomination.

Industrial Buildings

Industrial sites should be evaluated as individually significant properties that might be considered for inclusion in an amended Tempe Multiple Resource Area nomination.

Elementary and Secondary Schools

Two schools -- Mitchell and Thew elementary schools -- are closely associated with the subdivisions in which they are located, and should be included as contributing properties in an historic district. Other schools should be evaluated as individually significant properties that might be considered for inclusion in an amended Tempe Multiple Resource Area nomination.

Churches

Six churches are closely associated with the subdivisions in which they are located, and should be included as contributing properties in an historic district. The other churches should be evaluated as individually significant properties that might be considered for inclusion in an amended Tempe Multiple Resource Area nomination.

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Elmer Bradley / Bradley Construction Company

Tempe Contractor Elmer Bradley built several homes in the late 1950s. The Tempe Estates subdivision was developed by Elmer Bradley, Clyde Gilliland, and C. I. Waggoner in 1959, and the Bradley Construction Company built most of the homes in the tract. The survey lists one home in Tempe Estates, 1959, and three apartment buildings, 1959-60, built by the Bradley Construction Company. Elmer Bradley later became Mayor of Tempe (1968-1970).

- Sources: TDN, 29 Nov 1957, 10 Dec 1958, also see individual Historic Property Inventory Forms.
- Elmer Bradley Construction / 4535 S Lakeshore Dr # 5, Tempe, AZ 85282-7046 / 480-838-6951

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Clyde Gililand

Clyde Gilliland was a member of the Board of Trustees of the Tempe Elementary School District from 1940 to 1953. Gilliland was also a member of the Tempe City Council from 1932-1934 and 1938-1961, and served as Tempe's Mayor from 1960-1961. He was also a member of the volunteer fire department.

- <http://www.tempe.gov/museum/pnschools.htm>