

# The City of Ontario's Historic Context For the New Model Colony Area



ONTARIO PLANNING DEPARTMENT

*Preserving the Past, Planning the Future*

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## I. Executive Summary

Dairy farms, operated primarily by Portuguese, Dutch and French Basque farmers, have dominated the New Model Colony (NMC) landscape since the early 1900s. A historic context, explaining the local history of the dairy industry, has never been developed nor has this area been surveyed for cultural resources. This NMC historic context was developed in conjunction with a reconnaissance-level cultural resource survey of the NMC area to assist with understanding the built environment. The survey and draft context was developed by Galvin & Associates, historic preservation consultants, and funded in part with federal funds (Department of the Interior National Park Service) through a State of California Certified Local Government Grant.

In 1967, the County of San Bernardino designated 14,000 acres of agricultural land in the Chino Valley, located in the southwest area of San Bernardino County, an agricultural preserve. This area, referred to as the San Bernardino County Agricultural Preserve, has been protected by Williamson Act contracts and the 1965 Land Conservation Act since 1967. By 1980, this area had evolved into a world-class dairy center with more cows per acre and higher milk yields than anywhere else in the world. In the 1990s, California dairy operation costs and the demand for housing escalated, pressuring farmers within the San Bernardino Agricultural Preserve to consider relocating their dairies and annexing their land into adjacent cities. Anticipating the expiration of the Williamson Act contracts, this area was divided and portions were incorporated into three adjacent cities, Ontario, Chino and Chino Hills. The City of Ontario annexed 8,200 acres of the former San Bernardino Agricultural Preserve in 1999 and named this area the *New Model Colony* after the original *Model Colony of Ontario* established by the Chaffey Brothers, William and George Jr., in 1882. The original Model Colony was founded on innovative land development principles including a grand central boulevard (Euclid Avenue), pairing water rights with land purchase (Mutual Water Company), and an agricultural college (Chaffey College, est. 1885).

In preparation for annexation, the City of Ontario adopted a General Plan for the NMC in 1998, which contained innovative land development principles in an effort to continue the legacy of the Model Colony. The NMC General Plan provides for housing for an anticipated 100,000 people, commercial and industrial areas, parks, a lake, golf course, trail and bike links in a traditional neighborhood setting. A number of NMC specific plans, in various stages of development, are underway. These specific plans will guide future development. The survey and historic context contained in this report will provide a framework for understanding and preserving the history of the area as well as a foundation for integrating historic preservation into future land use planning, including future specific plans, site plans and development plans.

The NMC historic context identifies three distinct periods in local and regional dairy farming; 1) Free Grazing, 2) Dry Lot to Mechanization and 3) Intense High Technology. The reconnaissance-level survey identifies several property types and architectural styles found within the survey area. The figure below graphically illustrates the three

distinct periods of dairy farming and the building types and architectural styles that fall within these periods.

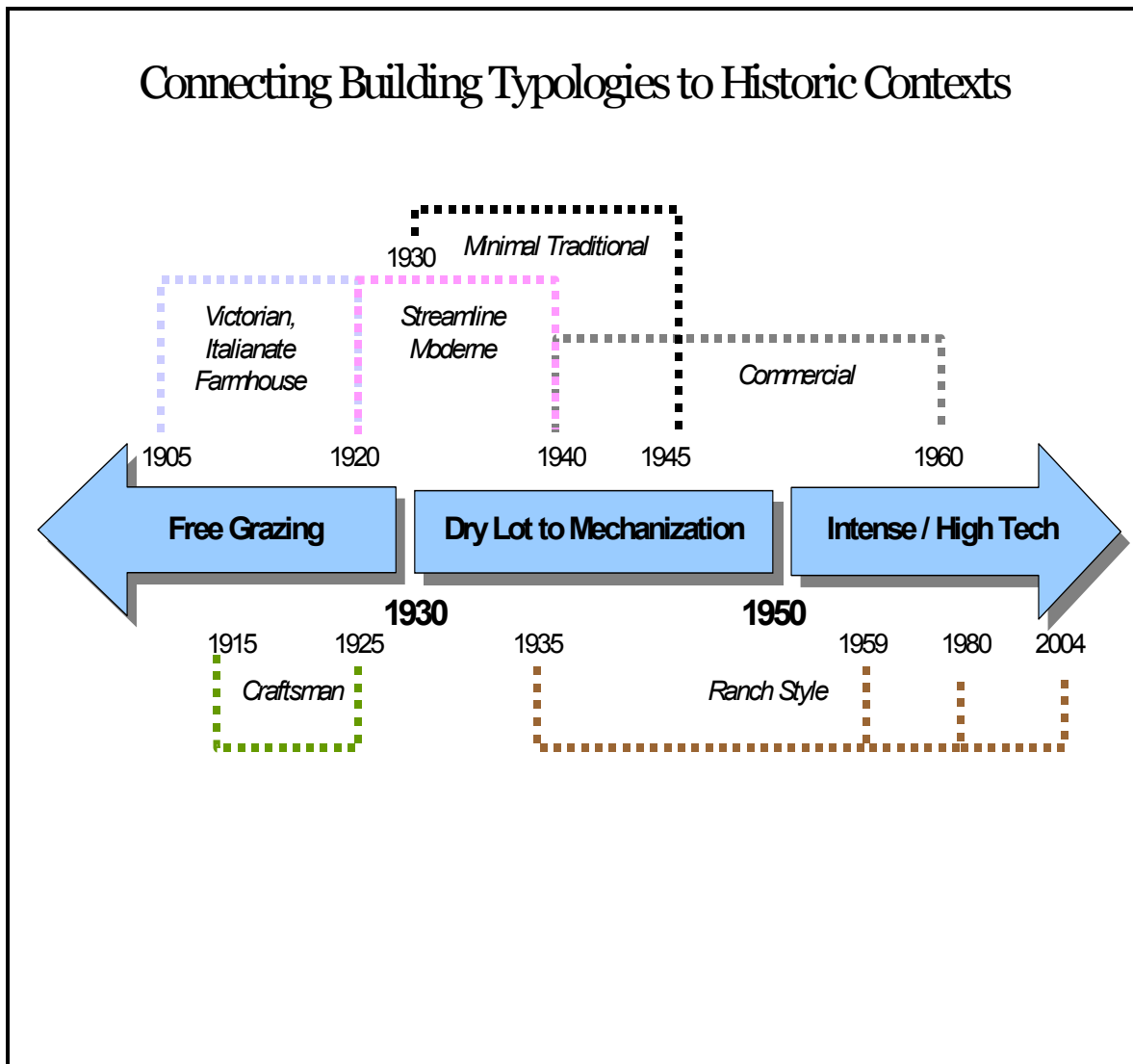


Figure 1

The 8,200-acre survey area consists of 711 individual parcels. Through an examination of building permits and pre-1950's aerial photographs, it was determined that 340 parcels contained structures that were at least 45 years old. Only properties with structures at least 45 years old were surveyed. Descriptions of each of the 340 properties are contained in 300 DPR 523 survey forms. If a farm spanned more than one parcel, then only one Primary Record was completed for that farm. The following is a summary of the property types and architectural styles found within the survey area.

Property Type	Total	Property Style	Total
Pre-1930s Dairy Farm	52	Art Deco/Streamline Moderne Milk Parlor	39
1930-1960 Dairy Farm	118	Craftsman Home	34
Post 1960 Dairy Farm	131	Ranch Home	133
Commercial	44		

**Figure 2**

The most significant type of structure constructed within the pre-1930s Dairy Farm period was the Art Deco/Streamline Moderne milking parlor. The survey area contains one of the largest concentrations of this type of building in this style in the State of California. The 1930-1960 Dairy Farm period represents the movement from free grazing to dry lot feeding and the introduction of milking mechanization. This progression in the dairy industry is reflected through the design and layout of the milk parlor, the layout of the farm, and the concentration of structures within the farm. The Ranch-style residence is most the most common type of building found within the survey area and represents the Post 1960s Dairy Farm period.

## II. New Model Colony Historic Context

The New Model Colony Historic Context provides a historical background for dairy properties located within the former San Bernardino County Agricultural Preserve and provides a framework for understanding and preserving the history of the area as well as a foundation for integrating historic preservation into future land use planning. Historic contexts identify the broad patterns of historical development and link the history of an area with the built environment.

This Historic Context was initially developed in conjunction with a reconnaissance survey intended to identify and characterize the potential historic resources within the New Model Colony boundaries and to identify those areas, property types and individual resources which should be included in subsequent research and intensive level survey and evaluation efforts. The survey and context development were partially funded by a 2003-2004 Certified Local Grant awarded to the City of Ontario and performed by Galvin & Associates, cultural resources consultants. It is expected that the context will continue to be developed as additional information becomes available through additional research, survey work, and citizen input.

### A. Background

In 1967, the County of San Bernardino designated 14,000 acres of agricultural land in the Chino Valley, located in the southwest area of San Bernardino County, an agricultural preserve. This agricultural land, which has been protected by Williamson Act contracts and the 1965 Land Conservation Act, has been farmed primarily by Dutch, French Basque and Portuguese dairy farmers for the last 50 years. By the 1980s, this area had evolved into a world-class dairy center with more cows per acre and higher

milk yields than anywhere else in the world. In the 1990s, as dairy operation costs escalated and the demand for housing in the region swelled, development pressures mounted and the process of incorporating this area into adjacent cities began. Anticipating the expiration of the Williamson Act contracts, this area was divided and portions were incorporated into three adjacent cities. In 1999, 8,200 acres were annexed by the City of Ontario; in 2003, 5,000 acres were annexed by the City of Chino, referred to as the Preserve; and the City of Chino Hills annexed the remaining few hundred acres of land.

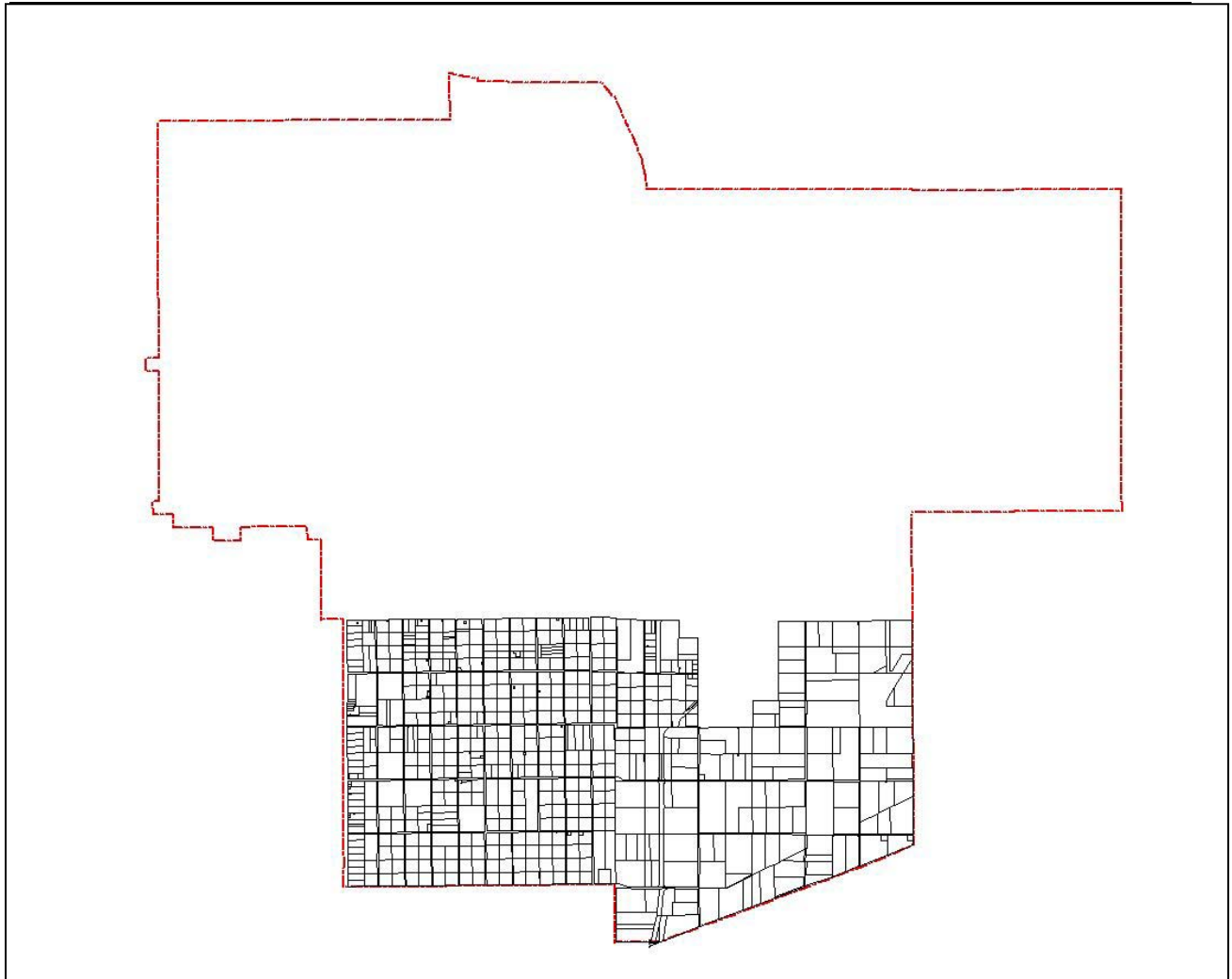
The City of Ontario named their portion of the former San Bernardino County Agricultural Preserve the *New Model Colony* (NMC) after the original *Model Colony of Ontario* established by the Chaffey Brothers, William and George Jr., in 1882. The original Model Colony was founded on innovative land development principles that included the distribution of water rights with land purchase (Mutual Water Company), a grand boulevard (Euclid Avenue) and an agricultural college (Chaffey College, est. 1885). In 1998, the City of Ontario adopted a General Plan for the New Model Colony that also contained innovative land development principles in an effort to continue the legacy of the Model Colony. Plans for the 8,200-acre New Model Colony include housing for an anticipated 100,000 people, commercial areas, parks, a lake, golf course, trail and bike links and old-fashioned streetscapes.



Over time, the New Model Colony area has been known as Santa Ana Del Chino, the Chino Valley, the Chino Basin, and the San Bernardino Agricultural Preserve or Ag Preserve. It consists of an expansive area of flat arid land that was historically sandy desert. The soil has since been amended with nutrients from cow manure due to the many years of dairy farming that has taken place within the area.

The NMC area is comprised of almost entirely dairy properties which include open space, at least one large milk parlor (barn), one or more single-family residences, and several outbuildings associated with the dairy industry; the average parcel size exceeds nine acres. The NMC area is roughly bounded by Riverside Drive to the north, Euclid Avenue to the west, Milliken/Hammner Avenue to the east, and Merrill Avenue and the San Bernardino County/Riverside County line to the south. Bisecting roads running east/west include Chino Avenue, Schaeffer Avenue, Edison Avenue and Eucalyptus Avenue, and roads running north/south include Bon View Avenue, Grove Avenue, Walker Avenue, Grant/Carpenter Avenue, Archibald Avenue, Sumner Avenue and Cleveland Avenue. The NMC area properties had never been surveyed or evaluated for historical significance prior to the survey completed by Galvin and Associates in the spring of 2004. The survey area included 711 parcels of predominately open agricultural land scattered with single-family homes and farm buildings.





The survey area has access to potable water from a multitude of wells in the basin as well as from Cucamonga Creek, which runs south bisecting the NMC before opening up into the Prado Flood Control Basin in southern San Bernardino County. There are three segments of transmission lines that also run through the NMC. These lines originate at the Etiwanda Power Plant located at the intersection of Etiwanda Avenue and the Atchison Topeka and Santa Fe Railroad line one mile north of the Interstate 10

Freeway. These lines transmit generated electricity through the NMC to the City of Chino and south through Slaughter Canyon to communities south of the Chino Hills. One line runs parallel to the westbound Edison Avenue to a substation located just north of the California Institution for Men (located south of Eucalyptus Avenue between Central Avenue and Magnolia Avenue).

There is a small newly constructed commercial area in the northwest corner of the NMC at the intersection of Riverside Drive and Euclid Avenue and a few large light industrial buildings that line Milliken/Hamner Avenue. With the exception of these commercial buildings, most of the buildings within the study area appear to date to the mid-twentieth century (late 1940s to early 1960s), although there are a handful of buildings that date to the 1920s or earlier. The earlier buildings are located nearest the western and northern boundaries of the NMC (along Euclid Avenue and Riverside Drive) in the former periphery of the cities of Chino and Ontario. A section of houses located between Archibald Avenue and Sumner Avenue just south of Riverside Drive were constructed in the past twenty years and were not included in the NMC study area.

Surrounding developed communities include the Cities of Ontario and Upland to the north, the city of Chino to the west, and the community of Mira Loma to the east. Other nearby development includes the Chino Airport located directly south of Merrill Avenue at the intersection of Euclid Avenue, California Institute for Men at Chino to the southwest, Herman G. Stark Youth Correctional Facility to the west, California Institute for Women, Prado Regional Park, and El Prado Golf Course to the southeast, and the Ontario Upland Sewage Disposal and Percolation Basins to the north.

## **B. Research Themes and General Historical Overview of Area**

A number of research themes guided the background historical research for the study area and served as an outline for developing relevant historic contexts within which to evaluate the properties present. Some of the research themes that were studied as part of this survey included:

- Early History of San Bernardino County and Neighboring Communities
- Ontario and Chino Established
- The Development of Dairy Farming Industry in Southern California
- The Dairy Industry in the Chino Valley
- Dairying Practices and Their Influence on Dairy Farm Layouts and the Design of Milk Parlors
- Ethnic Groups in the Project Area; Portuguese, Dutch, and French Basque
- Ranch Style Houses

### **1. Early History of San Bernardino County and Neighboring Communities**

San Bernardino County comprises three major areas; a valley basin in which the cities of Ontario and Chino are located, a series of high mountains, and a vast expanse of desert. In its natural state, the valley was a grassy land with native trees growing in the foothills and along the banks of streams. As early as 1500, Indians first inhabited the San Bernardino Valley and lived in small settlements called Rancherias. The Rancherias were located near streams or natural springs and contained 10 to 30



dwellings. The water and climate have been the two key factors in the development of the area. The climate is Mediterranean-like with dry, hot summers and cool moist winters. The water comes down from the San Gabriel Mountains to the north and percolates into the alluvial material of the valley floor and is stored below the surface. Because of its climate and topography, the San Bernardino Valley developed into the principal agricultural area of the county. However, during its early years, the area was used as a range land for cattle and grain fields and then as a sea of crops such as vineyards and citrus groves.

The first Europeans into the area were Spanish soldiers and padres traveling to and from the San Gabriel and San Luis Rey missions to the west and south. In 1772, Pedro Fages, a military commander tracked deserters through the county. In 1774, Juan Bautista de Anza led an expedition from Mexico and camped along San Antonio Creek near present day Ontario, naming the place Arroyo de los Osos, or "Bear Gulch." Mission San Gabriel Archangel, founded in 1771 proved to be the most economically successful of all the missions. Its outlying ranch lands, grain fields, orchards and vineyards constituted a vast pastoral empire, eventually extending many miles inland into the San Bernardino Valley. From the time of the Anza expedition until the Mexican Rancho Period the land around Ontario was used as grazing land by the Mission. Under Mission rule, cattle ranching became a major industry. The rangy, tough cattle thrived and bred rapidly in the benign Mediterranean climate. Soon hundreds of thousands of head of cattle were wandering across the lush pasture.

Starting in the 1830s, a trade route, known as the Spanish Trail, was established between Southern California and New Mexico. Traders from New Mexico traveled for two months to traverse the rough terrain carrying woolen goods on mules and pack horses to exchange for horses, mules, silks and Chinese goods from California. The San Bernardino Valley served as an excellent pasturage for the livestock of the trading expeditions.

Following the secularization of the missions, large land grants were given to influential citizens leading to European settlement of ranchos for raising cattle in the San Bernardino Valley. The Rancho period lasted from 1834 until the Mexican War of 1846. Raids on livestock were rampant during the Rancho Period. Colonists were encouraged to settle in the San Bernardino Valley to help protect the region from such raids. Recipients of the land grants included Spanish gentlemen (dons) from many of the first families of California, such as the Lugos, Sepulvedas, Yorbas, Bandinis, Tapias, Palomares, and Picos.

One of the largest land grants in the area was Rancho Santa Ana del Chino, which encompassed the New Model Colony project study area. In 1841, the Spanish governor Alvarado granted the 22,000-acre Rancho Santa Ana del Chino to his uncle, Antonio Maria Lugo. Lugo had been born at the San Antonio Mission in 1775 and was the son of a soldier. In time, he would become one of the wealthiest and most influential men in Mexican California.

Lugo deeded half the ownership of the ranch to his son-in-law, Isaac Williams following his marriage to Lugo's daughter, Maria de Jesus. Williams had come to California in 1832 and become a merchant in Los Angeles. Williams built the Chino Ranch and into an empire. He planted many field crops, a vineyard, fruit trees, and grew wheat. He constructed a mill to produce flour and established a soap factory. His home was built in a large quadrangle enclosing an interior courtyard, 250 feet on each side. Visitors described it as the largest and best arranged private home in California. Williams' ranch house was a quintessential example of the Rancho-period homes that would serve as the architectural inspiration a century later for a new wave of inhabitants to the area.

The Lugo's San Bernardino Rancho was primarily a livestock range. Four thousand cattle were brought from the elder Lugo's ranch in the present Lynwood-Compton area of Los Angeles. A local historian, Walter C. Schuiling described rancho living in the 1840s as "a pastoral, almost feudal way of life. Indians provided labor for the Rancherias. Raising cattle and horses were the primary activity- corn, wheat, barley, potatoes, peas, beans, onions and peppers were also cultivated to provide food. Rodeos or roundups were regularly scheduled after the calving season to brand, mark, and gild the livestock. Cattle within a designated area would be driven to one ranch location and livestock that did not belong to that ranch would be driven to their owners."

In 1847, a group of Mormons had separated from the Mormon Battalion on their way to Salt Lake City and ended up living at the Chino Ranch. They aided in the harvest and in building a gristmill. Gold seekers stopped at the Chino Ranch for rest and supplies. In 1848 the signing of the Treaty of Guadalupe-Hidalgo ended the Mexican War, which signaled the demise of the Rancho Period. Although many land titles were confirmed by the new American government, large grants of land for new ranches came to an end. A new population bringing different cultures began moving into the area displacing the Hispanic and Mexican inhabitants and their cultures. Free-ranging herds of livestock gave way to a new use of the land - agriculture.

In 1853 the County of San Bernardino was created and was divided into three townships; San Bernardino, San Salvador, and Chino. San Bernardino was designated as the county seat, with the Mormon Council House serving as the first courthouse.

Beginning in 1873, San Bernardino County saw many new railroad lines and train depots constructed. By 1886, the San Bernardino Valley had two transcontinental railroad systems. The first was the Southern Pacific, an offshoot of the Central Pacific. In the 1870s and 1880s, Cowboys continued to lead herds of cattle over trails through the valley to the railroads.

Another stimulus to growth in the San Bernardino Valley was the growing importance of citrus agriculture. The valley possessed factors especially favorable for citrus growing such as the decomposed granite soil, good drainage, available water, abundant sunshine, and cool winter nights. The completion of the railroads and the booming citrus industry created a land boom, especially in the valley area. During the last two decades of the nineteenth century, about 30 new communities were started in the county during the boom period including Ontario and Chino.

## 2. Cities of Ontario and Chino Established

Located on a sloping plateau at the base of the 10,000-foot Mt. San Antonio, the City of Ontario, California, was named for Ontario, Canada by George Chaffey, a Canadian-born engineer who came to Riverside in 1880. He and his brother William acquired 1000 acres of the Garcia Rancho in 1881 which they intended to subdivide into small fruit farms. The Chaffeys purchased an additional 6,000 acres that would become the cities of Ontario and Upland. One of the keys to the Chaffeys success as developers was their creation of a “mutual water company” in which each landowner became a stockholder.

Chaffey laid out the improvements and made water available to every parcel of land. Ontario began as an agricultural colony focused on primarily fruit growing. Both the citrus and the olive industries were popular agricultural endeavors in the area. Chaffey set aside one square mile for the Ontario town site with half of the area deeded to trustees for the endowment of an agricultural college. The first purchase of land in Ontario occurred in 1882 and the first edition of the local newspaper was on December 4, of that same year. The emphasis on agriculture within the community was evidenced by the construction in 1883 of an agricultural college on twenty acres in the Ontario Colony. Chaffey College was the first college in San Bernardino. In 1884 the Ontario School District was created. The first schoolhouse was erected on the same corner where Central school stands today- at “G” Street and Sultana Avenue. The South Side School was located on the northeast corner of State Street and San Antonio Avenue, which was built shortly after Central School.

In 1887 Edward Frasier placed a town site on Market- one and a half miles north of 5<sup>th</sup>- 2 miles west of Euclid Avenue. His special excursion train brought hundreds of buyers to Ontario’s Southern Pacific Depot from Los Angeles. The Chino Valley Railroad Station was erected on the far side of the existing tracks. This was a narrow gauge railroad that took passengers to Chino.

Ontario was incorporated on December 10, 1891. A bandstand was built on Euclid Avenue. The area continued to prosper in the citrus industry. In the 1920s, the largest business was the Exchange Orange Products Company (now Sunkist Growers, Inc.), which was a subsidiary of the California Fruit Growers Exchange. It was moved to Ontario in 1926, where it processed the culls into juice and cattle feed.

Population swelled in Ontario in the 1950s. Ten-acre orange groves in town were torn out by the owners and filled with homes. The construction boom was led by the California National Guard Armory at John Galvin Park. In 1952, over \$14,000,000 was spent on construction, \$11,000,000 of which was spent on 642 new single-family homes in 4 new subdivisions. In 1959, Ontario began to develop new areas to the east and south, including the Ontario Industrial Park, east of Campus Avenue between Mission Avenue and the Pomona Freeway.

Chino's beginning can be traced to Isaac William's Rancho Santa Ana del Chino, known for its cattle and fine horses, its sugar beet factory, its dairy farms, and its truck farms in the early days. After Williams died the Chino Ranch suffered difficult times until the ranch and some additional lands were purchased by Richard Gird in 1881. Gird imported dairy cattle and built up a herd of 200 milk cows, which was the start of Chino's more recent role as a dairy center of Southern California. In 1887 he subdivided half the ranch and set aside the town site of Chino.

Gird also established a narrow-gauge railway that was built to connect with the Southern Pacific line at Ontario. Gird had dreams of making Chino an industrial center as well as an agricultural one. He organized the Chino Valley Manufacturing Company and planned to develop an iron and steel industry. His endeavor with the iron industry never made it due to the land boom collapse in the 1880s. Gird went into business with the Oxnard Brothers and started planting sugar beets. The Oxnard Brothers built a sugar beet factory and by 1895 the Chino area was planted with over 5,000 acres of beets.

Most of the San Bernardino Valley communities that were established in the 1880s and 90s owed their growth during the subsequent decades to the citrus agriculture. Aside from citrus groves, grapes and other agricultural fields were also present. The Chino area underwent considerable agricultural change in the 20<sup>th</sup> century. During WWI, the American Beet Sugar Company moved to Oxnard in Ventura County but other industries took its place. In 1919 the Libby McNeil and Libby opened a cannery in Chino, and the walnut industry became very important in the 1920s.

### **3. The Development of the Dairy Farming Industry in Southern California**

In 1697, Father Kino, a Jesuit priest, first brought cows from Sonora, Mexico for use in the California Missions. Prior to that, Californians of Spanish decent had plenty of cattle but not a lot of milk. Most of their milk was obtained from goats, but it might take six goats to produce one quart of milk. The activities with the ox, both industrial and social, rested chiefly upon the male of the species and the female was little more than incidental thereto: cows were kept to get more bulls and steers.

Kino was followed in 1701 by another Jesuit priest, Father Agarte, whom historians proclaim as California's first agriculturalist. They set up a Mission at San Diego and husbanded the cattle, which they brought with them and protected the increase by prohibiting the slaughter of any of them for food.

During the long period of years beginning with the establishment of the Mission at San Diego, cattle became the leading business of the early settlers around the Missions. The cows were not prodigious milk producers. As the population in California grew, more cows were needed to meet the growing demand. Large numbers of cattle were brought from Kentucky and England.

The first herds of good cows to reach California were those led or driven across the plains by the gold-seekers of 1849. The cows were fed or grazed along the trail and contributed to the family menu on the way. These cows were the foundation stock of pioneer dairy efforts in the foothills and mountain valleys of the Sierra Nevada. During the late 1840s and early 1850s, Sacramento was the center of California's cattle market. It was during this period that dairying became an established industry in California. Fine stock was imported for the purpose of breeding. Within a few years, California's large dairy farms compared with any in the world. However, it was difficult to milk cows during this time since they were allowed to run wild. It took three men to milk them; one to hold the head, a second to restrain her legs and a third to milk her.

The coming of the railroad led to an increase in the number of farmers. In the 1880s, dairying was largely confined to Humboldt County, Pt. Reyes Peninsula, the coastal section of San Luis Obispo and the mountain pastures of the Lake Tahoe region. Up to 1890, dairying was still largely the dairy farmer's industry. Most butter, cream, etc. was made at the dairy. In the early 1890s, the first farm separators (mechanical milk separators) were introduced into California. With the advent of the farm separator, the factory, creamery, cheese plant and condensory began to assume a greater importance.

The California dairy interests were advanced by several organized efforts. The first State Dairymen's Association was organized as early as 1876, and held several good annual conventions, but could not command sustaining interest. In 1882 another State Association was organized to fight oleomargarine, and secured the State law restricting the sale of it, but provided no ways or means for the operation of the law itself. In 1883 another dairy association was formed to promote the industry through demonstrating profitable lines of export and to protect it from competition with bogus products. This association secured the establishment of the State Dairy Bureau in 1895. The association was otherwise forceful for several years, but failed of adequate popular support. In 1901 the Creamery Operator's Association was organized, by those chiefly on the manufacturing side as the name indicates.

Around the turn of the twentieth century, the milk manufacturing industry started to expand into other markets. Pasteur discovered that by heating milk to 140 degrees Fahrenheit for 20 minutes it would destroy germs of tuberculosis, typhoid fever and other pathogenic organisms. Due to his discovery, the milk manufacturing industry began to develop in other areas related to the dairy industry such as supply machinery and equipment for milk pasteurizing plants, coolers, pasteurizers, bottling machines and a score of other products. (Greene, 15)

There are three distinct phases in dairy farming in Southern California. The first phase was from 1900-1930 and consisted of free grazing of the cattle. The dairies were concentrated around the peripheries of major metropolitan centers to service the areas with the largest populations. The first dairies before 1930s were small family concerns, consisting of five or six acres. At the turn of the century, dairies were scattered all around Los Angeles County because the population increase spurred the growth of the



dairy industry. During the 1920s, the dairies gravitated to the southeastern part of the county around Paramount, Artesia, and Bellflower. The dairying areas of the Los Angeles Basin were largely populated by the Dutch immigrants who mainly settled around Hynes-Clearwater; today the area is known as Paramount.

Dairying in the first half of the twentieth century still consisted of an open range in which the cows were let out to pasture to feed and were brought into a milk parlor to be milked by hand one at a time. This type of milking did not produce the same quantities and quality of milk production as today, as the cows burned energy while grazing the fields and each animal didn't receive as many nutrients from the source of grains provided if the fields were overstocked with cows. Around the mid-century, a change in dairying practices took place that would change the manner in which cows are milked today.

The 1930s saw a large increase in people migrating to the area. Dairies too, then began to spring up in small numbers. The second phase of dairying, from 1931-1949 saw a change from free grazing dairying to dry-lot dairying with the mechanization of milking. This era saw many changes in three areas of the industry; 1) an increase in the number of cows, 2) an increase in population, and 3) legislative price fixing of milk.

In 1930, the Co-operative Dairy Product Association formed to negotiate milk prices with distributors for any surplus milk not used by the creameries. By this time, most of the dairy industry of Southern California consisted of producers (dairymen on contract to the creameries), processors (owners of the processing plants and transportation fleets), and the retailers.

The political influence on the developing dairy industry came from the state, county and city levels of government. During the New Deal, the state began passing legislation to control the dairy industry. From 1935 to 1945, the state passed four acts which controlled the minimum price of milk at both the wholesale and retail levels, provided for fair trade practices in marketing of dairy products, and promoted the use of dairy products through advertising and education. The state also actively fought tuberculosis rampant in the dairy herds. County and city health officials enforced the state sanitation standards for the dairies and creameries by frequent inspections.

Prior to World War II, dairies were widely dispersed throughout the Los Angeles Basin. Large clusters of dairies were found in areas such as Torrance, Artesia, El Monte and the San Fernando Valley. During this period much of the feed and fodder was available from the local area, and dairies usually occupied the less valuable land that was not suited to citrus or truck farms raising vegetables for market.

World War II resulted in a population explosion that contributed to uncontrolled urban sprawl. People began to spread out from Los Angeles because of the availability of land and the low interest rates that were available for first time homeowners and the returning GIs. As housing tracts sprang up on suburban land, dairies located nearest to the metropolitan centers of population shifted to the peripheries. This relocation tended to concentrate the dairies in the vicinity of Artesia and Bellflower. The Bellflower-Artesia



area was an ideal location for the dairying industry because of favorable weather conditions and because the district contained all of the specialized services that contributed to the efficiency of the industry. Hay and grain dealers, veterinarians, equipment handlers, specialized financing organizations, cattle brokers and a pool of skilled labors were all available within a few miles or a few minutes time.

One of the reasons that dairy farming was located in centralized locations such as the Bellflower-Artesia area is that production usually took place within the “least cost” location. The highest cost input component for dairymen is grain. This item is used in large quantities in order to maintain the extremely high production. The Basin area was geographically close to the Long Beach Port, which made access to feed for available. As the freeway system developed, dairy farmers could more economically farm in more outlying areas and still have access to feed. Dairymen in outlying areas could offset the cost of transporting feed by mixing their own feeds and placing more emphasis on locally produced materials such as barley, beet pulp, or cottonseed meal. The outlying areas would have more readily available green feeds.

The Dutch helped modernize the dairy industry from free ranging dairy herds to almost a factory type setting known as dry-lot dairying. They were familiar with this type of dairying in the Netherlands. The Netherlands was a small country that lacked the space for free range dairying. Portuguese milkers also had been familiar with the dry-lot methods on the island of Azore. Both of these groups of immigrants became dominant in dairying in California because they arrived at the precise time that specialized dairies developed to feed the growing urban population of Los Angeles.

One story attributes a Dutch family for the change in dairying practices to a more efficient method of milking. It explains that they were influenced by their native dairying practices and a lack of space... In a 1949 article from Westways Magazine, the author writes...

*One Dutch family living in Paramount could not afford pasture acreage for their cow and so they had her put inside. They fed her on linseed meal, hay and cottonseed instead of sending her to pasture. “Bossy” thrived and soon was grateful that she wasn’t driven out to work every morning. Her meals were served in her room, and she speedily responded by giving off gushing quantities of milk. Soon, the Dutch family started selling the excess milk to neighbors and purchased a second cow to keep up with a sustained demand for dairy products. They found that the forced-feeding technique was the pump primer. They sent word back home to the Netherlands and soon a rush of uncles, cousins, sisters and aunts came to the Paramount area...4,000 families comprise what they call the richest dairy farmers in the world. After two and half years of milking the cows, they are “burned out” and are sold as beef. The Indoor cows at Paramount and the adjacent milk “factories” were found to be healthier, less liable to diseases which lurk in pasturage. The Dutch colony cared for its bossies just as a factory owner does for his machines.*

The knowledge of specialized dry-lot farming brought to the Los Angeles dairy industry by the Dutch and Portuguese immigrants in the 1920s, countered the need for importing milk from the San Joaquin Valley, a process that had become too expensive.

Although dry-lot dairying was new to the United States, the practice was used in both the Azores and the Netherlands. In other large metropolitan areas of the United States, such as around Chicago and Boston, grassland dairies were forced farther from the cities by the rising cost of land and taxes. Because of the development of dry-lot dairy farming in Southern California, urban areas grew around the small, but highly productive dairies in Southern California.

The third phase of dairying in Southern California took place between 1950 and 1969. One of the paradoxes of the 1950s Los Angeles milk industry is that the rapidly growing human population and industry of the county squeezed the dairymen into smaller and smaller areas, forcing the dairy industry to produce milk more economically than before the squeeze began. The manpower shortage due to World War II had led to the use of machinery. Scientific feeding and breeding resulted in larger herds. Machines could handle more cows, consequently, the herds increased in size again. The dairy farmers moved to new dairies to take advantage of mechanization; their old barns were not large enough for the new machinery.

A second irony was that as the population grew, so did the market for dairy products. The huge population surge, while enabling and forcing the dairy industry to expand, ironically overflowed into the heart of the big milk producing areas in Los Angeles. The new residents of Los Angeles required approximately 19,000 acres land to live on per year. During the seven-year period from 1950 to 1958, a total of 6,615 tracts were developed and 340,478 lots were sold. The rate of population increased in Los Angeles County from 1925 to 1950 averaged 100,000 persons a year. As the population grew, so did the dairy herds in order to supply the newcomers with milk. Dairymen answered the challenge of producing more and more milk on less and less space by streamlining their operations. They turned dairying into an assembly line industry by developing "milk factories," where large numbers of cows are penned and efficiently milked on small acreages and all feed is bought to the farm site from outside sources.

During this period the dairymen organized politically to control urban development, pass zoning regulations favorable to dairying, and incorporated the dairy cities of Dairyland, Dairy Valley, and Cypress. The dairies that surrounded the town of Artesia on three sides incorporated in 1956 as the City of Dairy Valley in Orange County. Its inhabitants numbered 3,300 persons and 60,000 cows. The city remained a dairy community until March 1965 when the council voted to allow sub-dividers to enter the community. As the land rose in value and property taxes increased, the land became too valuable to use for dairying and slowly the farmers sold out.

The concentration of dairies within the Los Angeles area produced more efficient operation of the Los Angeles milk shed. By 1960, Los Angeles County led the United

States with 511 dairies and 112,000 dairy cows. The dairy industry produced 33.5 per cent of the total Los Angeles County agricultural yield. With one dairy farm on top of another, the servicing agent- feed sellers, equipment dealers, inspectors and creamery tank trucks- could visit dozens of dairy farms in the space of a few miles. The compact milkshed kept the servicing prices down, and that helped keep the price of milk down.

Milk produced close to large metropolitan areas is utilized for fluid uses. Milk produced in more distant areas is used for cottage cheese and ice cream; milk produced at yet locations more distant from the markets-such as in the surplus-producing areas of the northern San Joaquin Valley, the Sacramento Valley and the North Coast- are used for butter and nonfat dry milk. The number of fluid milk plants in California declined from 885 in 1945 to 461 in 1957, rising in 1959 to 485. Technological changes led to economies in processing and transportation, which, in turn led to larger but fewer operations. The increase in the number of fluid milk plants in the mid-60s was explained by the advent of drive-in dairy operations, a development counter to the trend towards bigness and fewness. Although drive-in operations were expanding rapidly, the general shift in the 1960s was towards centralized fluid milk operations and area-wide distribution.

#### **4. The Dairy Industry in the Chino Valley**

Dairies first came to the Chino Valley in the late 1890s, mostly on rented land. No dairy barns were built because milking was done in an open corral, and the cows were turned back to pasture. No hay or grain was fed, so milk production (and the price of milk) depended on the pasture. Dairymen initially came to the Chino Valley area because the native grass pastureland could be rented for \$2 to \$3 per acre per year and cows were about \$30 each. With no restrictions or regulations, it was easy to get into the dairy business. A few cows, a milk pail, a milk stool, ten gallon cans to hold the milk and barbed wire corral were all that were needed. Milk cans and pails were often washed in cold water and set upside down to drain.

The Chino Valley was a good location for dairy farming because of its vast areas to cultivate hay and its sunshine, fertile soil, and water supply. The middle European dairymen settled in the 1920s and 1930s in Paramount, Artesia and Cypress.

In the late 1950s and early 1960s many housing developments began in Westminster and Cypress and dairymen started to buy farm land in the Chino Valley which had been used mostly for growing grapes. By 1957, more than 135 dairies were located in the Chino Valley area.

In an article published in 1960 in the California Sun Magazine, a publication of the UCLA Graduate Department of Journalism, noted,

A combination of rising land values and the threat of increasingly higher taxes, of course, had proved a double-barreled inducement for dairymen to sell out. The

price for an acre of land is now \$3,500 in Los Angeles County, and many dairymen are already giving ground and reaping real estate profits. I was told by several dairy equipment sellers and cattle inspectors that they expect a mass exodus from the Bellflower-Dairy Valley area, when the price of an acre of land rises to \$5,000 an acre. The next big jump of the Los Angeles Milkshed will most likely be right out of the county, to Chino Valley in San Bernardino County. Chino offers Los Angeles dairymen good sandy (easily drainable) land, a good water supply, low initial prices for land, low tax rates, fast and cheap transportation of milk to the big city creameries via the Freeway, and a place where a dairyman won't be plagued with the specter of an ever-increasing population taking over the dairy land for tracts and housing lots.

In moving to the Chino Valley area, the dairymen established the most efficient and modern dairies in the nation. In the old production facilities one man milked 100 cows twice a day. With the technology of the new milking systems (of the 1950s-60s) one man easily could milk 450 cows twice a day. One of the most important ways that dairymen were able to meet their needs as business people and workers was to join a labor union. The Teamsters were never very active in the Chino Dairy Preserve, but the Christian Labor Union (mostly a farmer' union) was. Farmers generally joined the union as a way to access health and other employment benefits, but soon saw the value of being Union members when they needed advocacy.

An Agricultural dairy preserve was established in 1960 that encompasses the current study area. The preserve was established to protect dairies from encroaching development. At the time, many dairy farmers entered into long-term agreements with the county such as Williamson Act contracts, which would make it difficult for the dairies to leave. In 1987, the county Board of Supervisors re-evaluated the preserve and agreed to continue to protect its status. However, some dairies and farmers who wanted to leave but had to remain because of their contracts, began to want some local control over their affairs.

In 1993, some of the preserve's residents asked the Local Agency Formation Commission for San Bernardino County (LAFCO) if they could incorporate a new city called El Prado so they could have local control over the area's land uses and be able to develop infrastructure. LAFCO rejected the proposal to create El Prado because the residents did not possess the resources to fund its creation. After that attempt failed, LAFCO determined in 1994 that the agricultural preserve would be placed under the spheres of influence of Chino and Ontario. The cities would be allowed to annex land in the spheres but would have to form a plan designating land use in the area and file an environmental impact report.

By 1979, the largest concentration of dairies in the world was located in the approximately 18 square miles that comprise the Chino Valley (which includes more than the current study area). Sixty percent of the milk produced in the State of California was produced in this area. There were fewer than ten dairies in the actual city limits of the City of Chino and about 30 dairies were lost from the City of Ontario due to

the encroachment and construction of 30,000 homes to the City's southern edge. Some of the dairymen sold their land to developers for higher land prices (\$25,000 to \$50,000 per acre).

Dairy owners have battled to lift the preserve's development ban since 1987, when supervisors agreed to limit the area's use to agriculture for at least a decade. As opposition to the limits grew, Supervisor Jon Mikels called for lifting the prohibition midway through the 10-year term. Arguments for keeping the preserve intact included the fact that it is a safe haven for migratory birds and an economic engine for the Inland Valley. Lifting the preserve could endanger a \$750 million-a-year local dairy industry employing about 5,000 people and could also endanger tax breaks that were enjoyed by some Dairy Preserve farmers.

Ontario and Chino were given larger spheres of influence over the estimated 15,000-acre Dairy Preserve in September 1994. LAFCO voted 4-3 to adopt a map that extended Ontario's sphere of influence to the south to include another 8,000 acres and Chino's sphere to the southeast to include another 7,000 acres. Extending the spheres of influence was the first step toward annexation and eventual development.

The California dairy interests have been advanced by several organized efforts. The first State Dairymen's Association was organized as early as 1876, and held several good annual conventions, but could not command sustaining interest. In 1882 another State Association was organized to fight oleomargarine, and secured the State law restricting the sale of it, but provided no ways or means for the operation of the law itself. In 1883 another dairy association was formed to promote the industry through demonstrating profitable lines of export and to protect it from competition with bogus products. This association secured the establishment of the State Dairy Bureau in 1895. The association was otherwise forceful for several years, but failed of adequate popular support. In 1901 the Creamery Operator's Association was organized, by those chiefly on the manufacturing side as the name indicates. (Pacific Rural Press, 1916, 312)

## **5. Dairy Farming Practices and their Influence on the Layout of Dairy Farms and the Design of Milk Parlors**

This section will describe how the buildings on a dairy farm are used, what the family and farming lifestyle entails, and what the layout of the farms and buildings are like.

In 1860 the system of dairy tenantry peculiar to California took form. Coastal regions have a large rainfall and a longer grazing season and a cool summer, which made for cheap feeding and easy milk handling. Sheds were built for milk racks, churns and vats; the cows were kept under the sky and milked in corrals floored with mud or dust. These sheds and corrals were built here and there on the property and a bunch of cows and men, including a cook and butter maker, assigned to each. Later, these single places, to save the land owner from worry and trouble, were leased to different tenants; the tenant paying the owner a cash rent per cow and furnishing his own help and equipment



and agreeing to raise a certain number of calves. For new building and other improvements the landowner furnished the materials and the tenant the labor. The owner had to keep the cows up to the number assigned to the ranch and for such supply he grew to milking age the calves the tenants furnished him. It enabled many to get a start with small capital and to accumulate something with which to establish themselves as owners in newer dairy regions. (Pacific Rural Press, 1916, 312)

In 1911, the cows were milked in two shifts, owing to the size of the barn. Before a drop of milk was taken from them, they were thoroughly cleaned around bag and flanks. First they were gone over with a currycomb and brush, then washed and wiped dry by hand. Every cow in the stable was thus treated before any cow was milked. In the winter when mud would stick to the hide, water was applied with a hose to see that they were thoroughly cleaned before milking. All the hair near the udder was also clipped short to insure cleanliness. This cleaning was one of the first items of the extra expense of keeping a certified dairy. Milkers could only attend to about 20 to 25 cows a day, instead of the 30 or 35 that they might handle without that care. Milking was done through a cloth and the milk was taken into a separate room to be emptied into cans for transportation into the bottling room. The milkers were dressed in clean white cotton clothes when milking. The clothes were kept and put on in a special room where they would not gather dust. After milking, all manure was loaded at once into a manure spreader and taken to the alfalfa fields as fertilizer and was not permitted to remain to breed flies and dry into a dust. The cement floors of the barn were then hosed and scrubbed and that part of the barn remained vacant until the next milking. The wash water ran off through pipes into a cesspool, from which it was pumped into the irrigating ditches to fertilize the fields. (Pacific Rural Press, 1911, p. 369)

1911- The cows are given enough alfalfa to keep them contented during milking. The rest of the food during the summer is put in the 15-acre run for the cows to gather up themselves. In winter they are kept in yard, which are graveled to prevent the mud from forming, and are fed in an open shed, which they can enter at any time. This building can be closed on any side from which wind or rain comes, to give the herd shelter. The other sides are left open to permit plenty of light and air to come in. (Pacific Rural Press, 1911, 382)

1940- The average dairy cow spends one hundred and fifty days in the pasture each year.

In 1959- The Assembly-Line Milk Parlor- "They don't milk cows anymore, they milk the stanchions." The dairyman considers his cows as mere units for the efficient conversion of alfalfa and enriched feeds into milk with high butterfat content. Factors such as rising land values, increased taxes, building costs, transportation costs, availability of credit and the rising cost of food play as important a part in the dairyman's ability to make a profit as the fact that he has an efficient herd of milk producers. (Ross, 54)

Cows from a large herd run into the milking parlors, the number of each animal is stamped in brilliant vermilion on her haunches. A dairyman's helper goes quickly down



the line of cows, spraying the milk parlor floors and the cow's udders with a high-pressure spray. A feeder then wheels his cart down the row of stanchions, shoveling out concentrated feed as he goes. As the cows begin to feed, a milker quickly attaches the vacuum-operated milking pots to the cow's teats, making his hook-ups, both to the cow and to the vacuum line, with deft and timesaving movements. As soon as one string of cows is milked it is herded out and the next string is quickly led in. (Ross, 54)

In 1963- dairy cows live in antiseptic concrete and steel stalls. The dairying operation has built in conveniences for both the cows and dairyman. The goal is to produce tremendous volumes of milk under hospital clean conditions. (Westward Mag., 14)

The dairy is equipped to feed and milk twice daily as many as 1,5000 Holsteins (in 1963) and is a model of the efficiency to make the dairy operation profitable. Heart of the plant is three milking barns (one can milk up to 6 cows at the rate of 80 an hr.). (Westward Mag, 14)

(1963) Cows are kept in steel and concrete dry lots where they can be comfortably housed and handled. (Westward Mag, 14)

(1963) Extensive acreage is intensively cultivated to produce feed, which is brought to the cows. (The cows are not turned to pasture as in the past). (Westward Mag, 14)

(1963) Land costs make it necessary to restrict acreage to intensive growing. In addition, cows in pasture trample their feed, burn up too much energy, and are not assured of getting enough to eat for top milk production. (Westward Mag, 15)

(1963) Feed is stored at the feed mill in a series of glass-lined steel tanks, some of which are 20 ft. in diameter, 50 ft. high, and have a capacity of 350 tons. The feed mill is part of a system that includes a mixing plant for blending feeds that give the highest possible milk production. The cows eat 40 tons of hay, 25 tons of silage and 25 tons of grain every day. Hay is still the most important part of the cow's diet, which is stored in a barn 225 ft. long. (Westward Mag, 15)

After loafing and eating for several hours, the cows are ready for milking. Before they can enter the milking barn or "parlor" however, they are sprayed down in the wash box. Steel piping is used for durability and ease of maintenance and fabrication. (Westward, 15)

The cows are then funneled into the milking parlor, a glittering showroom of well-scrubbed tile, stainless steel feeders and stainless steel chrome steel tubing. "Milk barns are so expensive that it doesn't pay to let them lay idle." (Westward, 15)

The pipe works, stanchions and gates in the parlor use chrome steel to cut down on repair and maintenance costs and to make the barn easier and faster to clean between milkings. (Westward Mag, 15)

Once a cow is in her stall, milking requires only a little more than 4 minutes. As the milk courses through tubing to a cooler and storage tanks, it is weighed, and for every five pounds of milk the cow gives, she receives a pound of grain, which is automatically dispensed into a feeder. A cow will give about 25 pounds at each milking. (Westward, 15)

The milk is held on the farm for only a few hours before it is pumped into gleaming insulated trucks and hauled off for bottling (Westward, 15)

Efficient operation of dairy farms is an economic necessity. Dairies that do not stay efficient are forced out of business. Those remaining must become more efficient to keep up with the demand. (Westward, 15)

(1959) What sort of life does the average dairyman lead, operating his farm? In the company of H.H. Bouslog, of the California Bank, Pete Ross (author of "The Problem of Food Supply; Milk for Los Angeles) visited the dairy of Martin Jongsma (familiar name from study area), of Dairy City (now La Palma or Artesia). Jongsma, at 24, was slightly younger than the usual dairyman. Bouslog assured him; however, the dairyman's workday is like that of every other small dairy producer in the area. "I get up at 1:30 in the morning," said Jongsma, a tall young descendant of Friesland herdsmen in Holland. "And by a quarter to two, I'm milkin'." Finished with his milking by 6:30, he and his helper sluice out the milk barn, a large, partly enclosed concrete building where the cows are milked as they feed. Jongsma and his helper then clean the milking machines and are finished by 8:30. They can eat breakfast, and Jongsma can take a nap until 11:00 if he has no business to attend to. (Ross, 53)

From 11:00 to 1:30, Jongsma works with his non-milking cattle, his bulls and his dry cows. By 1:30, he is ready to start his milking cycle again. When the creamery truck comes to pick up the 650 gallons of milk his herd produced that day, it is 6:30 in the evening. Until 8:30 or 9:00 p.m., Jongsma must clean his milk tank; clean his milking pots, dismantle all his pipes and tubing, and generally get ready for another day to begin the next morning at 1:30 a.m. Then he can go to bed- after a 16- to 18 hour-day of grueling labor. (Ross, 53)

Therefore, a farm consisting of over a thousand cattle would necessarily employ nearly 20 people full time. Because the hours of work are by nature a "swing shift," of several hours in the very early morning and several hours in the afternoon/evening, with the late morning hours free, many of the employees live on or near the farm. (City of Ontario Oral Interview, September 23, 2003)

Another change reveals itself in the local architecture. Barn styles have changed since the inception of the preserve. Barns were once built in what is referred to as the "flat" style. This was a long, flat barn with two rows of cows facing each other. Milkers would come in behind the cows and kneel behind the cows to wash their udders and hook up the automatic milking equipment. There is a new type of barn architecture, however, referred to as "herringbone" style. The cow's stanchions are placed at an angle in order

to use space more efficiently and the cows climb a gentle grade from the floor into their stall so that when the milkers come along, they do not have to kneel because the cows are at an elevated height. This is a labor and time saving device because it eliminates the amount of time it takes for milkers to kneel down to access the udders of the cows. Many farms now sport the new “herringbone” style of barn in the agricultural preserve area. (City of Ontario Oral Interview, September 23, 2003)

1940- Holstein cows predominate on these dairy farms simply because they produce larger quantities of milk than other breeds. It takes three hundred and fifty squirts from the cow to make a gallon of milk. The average dairy cow consumes two tons of hay, a ton and one-half of concentrates (for vitamins), two and one-half tons of silage. A dairy cow that fails to produce 4 gallons of milk a day is headed for the slaughter house on most farms. (Daily Report/ June 20, 1940, p 6)

The cows are all Holstein-Friesian because they are the biggest and highest milk-producing animal. Their best production temperatures are 40 to 100 degrees and they are ideally suited to the warm, dry weather conditions of the NMC area. (Ortman, 166)

Although some aspects of dairying resemble industry, the dairyman himself still operates as a farmer. He cannot respond to the market quickly when prices change because of supply and demand. Cows continue to produce milk even when milk prices fall. Conversely, when prices rise the dairyman cannot quickly increase his production. (Selleck, 61)

The apparent closeness of the dairies, however, had distinct economic advantages for the type of dairying they practiced. By locating near each other, they not only were able to retain their Dutch habits, but also were able to run their dairies more efficiently because the close proximity made bulk feed delivery and milk collection easier. The dairy communities banded together to defend themselves against neighbors who complained loudly of excessive flies and odors. (Selleck, 73)

## **6. Ethnic and Social Influences within the Region; Portuguese, Dutch and French Basque Dairy Farmers**

This section will discuss the influences that led to ethnic migration to the area, the influences that have drawn these ethnic groups to the dairy industry, what the social practices and influences are within the community, and how these groups have influenced the styles exhibited within the built environment.

The preponderance of information on the ethnic groups in the study area focused mostly on the two larger groups; the Portuguese and the Dutch dairy farmers. No information was located on the French Basque, but this may be because they are less represented. There is a small group of dairy farmers or occupants of Mexican decent, but this group may have more recently occupied and farmed the land because it does not appear that there are many (less than 5) parcels that are owned by Mexican

families. Two resources that were the most useful in providing information on the ethnic groups in the area were a series of personal interviews conducted by the City of Ontario and a study conducted by Trudy Vermeer Selleck in 1995 for a dissertation for the University of California at Riverside.

The group of immigrants that Selleck studied were too small in numbers to establish their own towns or neighborhoods. Consequently, they were forced from the beginning to rely on existing networks. As they prospered, some did establish their religiously exclusive networks by founding congregations and schools; but only a very small percentage of Dutch immigrants actually participated in these networks. (Selleck, 2)

A closer look at immigrant groups will find that many old cultural ties remained strong even beyond the first and second generations. Family networks continued to keep the immigrants together. (Selleck, 4)

Selleck's study looks at the Dutch dairy farmers of Southern California from the period 1920 to 1960 as an example to study the historical problem of community. From this group, she looks at the various supportive networks they participated in and determines the extent to which these networks contributed to their economic success and the retention of ethnic ties. (Selleck, 6)

Twice, forces of modernization and urbanization pushed the dairies out of a geographic region and forced them to reestablish themselves in another area, seemingly destroying one community and building a new one at a different location. (Selleck, 6)

The Dutch, who came to the United States during the early part of the twentieth century, however, never immigrated in such large numbers and lacked the population to form a complete community of only Dutch persons. They did form their own church congregations and founded Christian schools. (Selleck, 7)

Many of the Dutch immigrants to California came from the province of Friesland in the Netherlands. These Frisian dairy farms became successful in the California dairy industry because they had already experienced the modernization of dairying in Friesland. (Selleck, 7)

The Dutch helped modernize the dairy industry from free ranging dairy herds to almost a factory type setting known as dry-lot dairying. (Selleck, 8)

The reasons that the Dutch emigrated from Friesland were high taxes, expensive goods, and a lack of work. The period before and during World War I, was one of free immigration. From 1900 on, the number of persons immigrating to the United States from the Netherlands each year increased. This increase in emigration continued in spite of the urgent letters sent by Dutch residents of the United States during 1920-1925 to relatives that this was not a good time to emigrate because of the bad economic condition, especially for farmers. (Selleck, 10, 14, 16)

The Dutch immigrant community has retained much of Dutch culture even though immigrants from the Netherlands have had ample time to assimilate, as they began arriving in the New York area as early as the Colonial period. (Selleck, 18)

Selleck's report studied how the Dutch immigrants in Southern California settled and assimilated into the receiving culture and analyzed the Dutch dairy settlements of Southern California to determine the extent and nature of the networks established between the immigrants and the receiving culture during the time of three distinct physical moves of the dairies from 1900-1960. (Selleck, 18)

By the nineteenth century, large areas of Iowa, Minnesota, and Wisconsin had established many Dutch towns. In the nineteenth century, a few attempts at Dutch colonization of California resulted in abysmal failures. In the twentieth century, the Dutch settled in California, especially Southern California and became quite successful at dairy farming. Some of the Dutch settlers succeeded in building a large dairy industry; others built schools, churches, and auxiliary businesses. (Selleck, 30) (Selleck, 31)

The main occupation in Friesland was dairying. Another area, Oppenhuizen also had a shipyard where wooden ships were repaired. By 1900, the mechanization of the dairy industry boosted the availability of construction jobs as creameries needed to be built all over Friesland. (Selleck, 44)

The dairy industry in Friesland, because of the lack of land, used corral-type dairying techniques. Dairying had become mechanized in Friesland in the early decades of the twentieth century. The Frisians, who emigrated, took their knowledge about modern dairying methods with them and applied it in Southern California. The capital they brought to California consisted of this specialized knowledge about dairying. (Selleck, 44)

Dairying was the main occupation in the Southwest area of Friesland called Wijmbritseradeel. Most farms were not large. A dairy with 35-40 cows was considered substantial. The cows grazed on the grasslands. In the winter feed needed to be substituted for the grasslands. (Selleck, 44-45)

Although Friesland remained an important dairy region in the Netherlands, its agricultural economy reached a plateau. The inability for the area's economy to expand made it difficult for the sons of dairy farmers to make a living in the area. The "push" factor may have increased the emigration to the United States. The farmers, who immigrated to Southern California because they needed work, came from an area where they had already modernized the dairy farms. In other words, these were not displaced poor peasants, but skilled farmers able to transfer their knowledge to the new county. (Selleck, 52-53)

The dairy industry flourished between 1899 and 1919. Decline set in after World War I, the time of the worldwide agricultural depression and continued throughout the 1920s and 1930s. (Selleck, 53)

At the turn of the century, various land companies tried to settle groups of Dutch emigrants in California. Some failed because the land sold was not suitable for farming, others failed because the land was sold at too high a price. The developers persuaded some Dutchmen to invest by advertising in Dutch newspapers, but most Netherlanders did not participate. Although some emigrants remained in California they have been absorbed into the general population. Church histories recorded Dutch families in California as early as 1900. Most emigrants chose to settle near their countrymen. (Selleck, 55,56)

The Frisian dairy farmers of Southern California were considered the most successful of all according to J.A.A.Hartland. The young Frisian milkers were in high demand and received high wages enabling them to save enough to begin their own dairies. (Selleck, 56)

The core Dutch dairy farmers participated in a religious, economic, and social system of specialized networks. The intricate strands of these networks bound the Dutch dairy farmers to the other Dutch immigrants, and to the American society at large. (Selleck, 57)

Proof of the existence of a Dutch dairy community can be found by the type of dairying, which developed around the cities of Los Angeles County. Dairies either used grasslands or areas adjacent and around large cities. In Los Angeles County, however, the dairies persisted long after the city had grown and surrounded them. Perhaps this had to do with the type of close-knit community the Dutch preferred, they tried to remain in the same place. Eventually, urbanization caught up and they were forced to move on. (Selleck, 57)

Looking only at the physical dairies it seemed that the Dutch all lived in close proximity of each other. Actually the nature of the dairy industry made it efficient for the dairies to cluster. Non-Dutch dairy farmers also lived in the same dairy regions. The Dutch dairy farmer did not necessarily live next door to another Dutch dairy farmer. Furthermore, most of the Dutch immigrants were not dairy farmers. They lived scattered across Southern California and had assimilated into American society. (Selleck, 57)

The first dairies before 1930s were small family concerns, consisting of five or six acres. They were scattered around the county, but the Dutch immigrants mainly settled around Hynes-Clearwater (today the area is known as Paramount). Here they developed a Dutch community, establishing churches, both the Dutch Reformed and Christian Reformed Churches formed congregations. Family life centered around the church. The earliest Reformed congregation was founded in 1923 in Los Angeles. Later it spun off a daughter congregation at Hynes in 1925. Still somewhat later in 1932 another congregation was formed in Artesia. The establishment of these congregations corresponded with the movements of the Dutch. (Selleck, 58)



The Frisians who immigrated to Southern California between 1900 and 1930 left cohesive urban townships. The dairymen banded together to run co-operative creameries in their homeland. This is where they had acquired the modern dairying skills. In Southern California, they willingly joined cooperatives, this time with other immigrants and Americans. The Dutch and Frisians did not have enough people to form their own cooperatives. Instead, they readily joined cooperatives with others. By doing this they became part of an extensive economic network reaching far into the economy of California. During this period, cooperatives were the norm in agriculture. (Selleck, 60)

Most Frisians were active members of the Gereformeerde Church, which encourage strong family ties. The religious network both in Friesland and in Southern California valued close family ties. The Friesians who settled in Southern California could continue to keep in touch with their hometown by frequent letter writing and reading the regional newspapers. The regional newspapers were preferred over the provincial and national papers because they reported much local and family news. The church also occupied an important position in the role of keeping the emigrants together and in touch with the churches back home. (Selleck, 61)

In 1979 about 70% of the dairy people in the Chino Valley were of Dutch descent, 20% Portuguese descent, and the balance of different background, all American citizens. (Ortman, 166)

“The middle Europeans are very family-minded and stick together; they have been called ‘clannish.’ Everybody knows everybody in their controlled environment.” (Ortman, 166)

The dairymen established their own churches, their own Christian parochial schools and their own dairy associations. The Ontario Christian School is located on the grounds of Ontario Christian High School in Ontario and was built in 1944 by Dutch families who immigrated to the Chino Valley in the 1920s. It wasn’t just in the classroom where the Dutch imprinted their heritage. The dairy families who migrated from Holland brought more with them than just their knowledge of Holsteins. Besides school, they also started churches and brought olle bollen, a doughnut made during Christmas. While the families loved their new country, propagating the culture that reflected their homeland was important to them. (Daily Bulletin/ Jan 22, 2001, pA-1)

Many Dutch families who landed in the Chino and Ontario area came here after hearing of a climate ripe for dairying. By the late 1920s, a significant population of Dutch immigrants operated about two-dozen dairies.

The first Dutch immigrant dairymen arrived in Southern California after World War I. They found work as milkers at existing dairies. The thrifty immigrants earned a high enough wage as milkers to save money to buy their own dairies within a few years. The skilled milker could demand a high wage for his abilities. Some rented dairy farms before purchasing their own property. This allowed them to go into business for

themselves with less capital. They proved that even a small plot of land could support a specialized dairy, if they kept the cows corralled and bought feed instead of raising it themselves. Others soon copied this method of dairying; it spread from Southern California throughout the state, and became the dominant type of operation replacing the pastureland farms. The Portuguese immigrants from the Azores, like the Dutch, also had experience with corralled or dry-lot dairy farming. Both groups of immigrants brought the same type of dairying they were familiar with in their homelands to Southern California. (Selleck, 72)

The nature of the dairy industry made it more efficient and economical for dairies to be confined to the outer edges of the towns and cities. The Dutch dairymen were not all in the same area because not all dairies were owned by the Dutch. The apparent closeness of the dairies, however, had distinct economic advantages for the type of dairying they practiced. By locating near each other, they not only were able to retain their Dutch habits, but also were able to run their dairies more efficiently because the close proximity made bulk feed delivery and milk collection easier. The dairy communities banded together to defend themselves against neighbors who complained loudly of excessive flies and odors. (Selleck, 73)

Almost all of the dairies are family owned and operated. Alta-Dena (in 1979) was the largest and most modern facility in the area- marketing milk products in every state in the country. Of its 300 employees, 76 are family- children, grandchildren, etc. (Ortman, 166)

According to those interviewed in 2003 by the City of Ontario, there were families of various European ancestries relocating to the area in the early days of settlement of the preserve. There were Dutch, Portuguese, Basque, and Mexican. The participants in the interview claimed that there was “no cross-cultural tension,” but noted that “intermarriage was rare up until recently.” The families shared a similar set of family values, based on a Christian belief system. Because they lived in such an isolated enclave, traditions of courtship and marriage prevailed for many years longer than they might have if they had been forced to intermingle with other (American) cultures more. For instance, young people did not date in the same way other Americans were dating at that time. They were closely chaperoned, and marriages were based, to a certain extent, on the approbation of the parents of the two parties. This has changed with the urbanization of the area and resultant exposure to other value systems. (City of Ontario Oral Interview, September 23, 2003)

A unique feature of the dairy industry is the style of employment. Farmers must employ several workers because, as Mr. Koopman pointed out, milking 60-90 cows per day is a full time job for one person. Therefore, a farm consisting of over a thousand cattle would necessarily employ nearly 20 people full time. Because the hours of work are by nature a “swing shift,” of several hours in the very early morning and several hours in the afternoon/evening, with the late morning hours free, many of the employees live on or near the farm. Because of this living arrangement, Mr. Koopman has become familiar (and at times even intimate) with the entire family of his workers and grows to feel a

sense of responsibility toward them. (City of Ontario Oral Interview, September 23, 2003)

Mr. Koopman noted that farmers' children tend to become farmers and to keep the family business within the family. There is an attachment to the work, an attachment to the location and the community and an attachment and sense of obligation to the workers. (City of Ontario Oral Interview, September 23, 2003)

All of the interviewees noted that there has always been a deep sense of community in the area derived, possibly, from the shared sense of accomplishment and hard work that were put into the settlement of the area. In addition, the sense of camaraderie that endures to this day may derive from the shared sense of being members of the same, unique community engaged in what is a very alternative profession in this locality at this time. (City of Ontario Oral Interview, September 23, 2003)

There are two local eateries that have provided a sense of continuity over time, where locals were known to gather, share meals and exchange gossip. These two places are Flo's and the local donut shop, which was referred to only as The Donut Shop, as opposed to its proper name. Every morning, after morning chores, the farmers frequently have found themselves congregating at one of these locales. There they are able to exchange information with one another in a manner they feel is more effective than formal methods of communication, such as newspapers or newsletters. Word of mouth continues to be the most efficient means of communication in this community. Another location was The Bottom Dollar, a bar that no longer exists. The farmers met there after evening chores. (City of Ontario Oral Interview, September 23, 2003)

The Dairyman's have a Dairyman's Bowling League that meet every Friday morning and is a very competitive league. The league meets on Friday mornings because, unlike other leagues, they aren't able to meet in the evening because the milking has to be attended to. The men, as bowlers, were rare in that they were only able to meet mid-morning on a weekday in between feedings, unlike other bowlers who worked full time day jobs. There are only 14 teams now left in the league due to the outflow of dairyman from the area in recent years. (City of Ontario Oral Interview, September 23, 2003)

The West End's oldest known continuously producing dairy farm, owned by A.A. Grant, consists of all Jersey cattle. Located on South Euclid Avenue, Grant has been dairying without interruption since 1923. His farm's entire production goes to an Ontario creamery. Ten years after A.A. Grant began his dairy, a group of dairyman gathered to form the Dairyman's Service association, with the late W.M. Baldwin and C.S. Musser as the two charter board members. (Daily Report/ June 20, 1940, p 6)

## **7. Ranch Style Houses**

The Ranch style of architecture originated in the mid-1930s in California. It gained in popularity during the 1940s and became the dominant style throughout the country during the decades of the 1950s and 1960s. The popularity of "rambling" Ranch houses

was made possible by the country's increasing dependence on the automobile. The Ranch style is also referred to as the "rambling" style, and was loosely inspired by the early Ranchos of the post mission period in California.

Ranch style houses are one-story buildings with a long, horizontal emphasis, seeming to hug the ground, with larger ranches giving the impression of rambling over their terrain. The house usually has a low-pitched roof and wide overhanging eaves and is often in a rectangular, "U" shaped, or "L" shaped plan with a cross gable or gable on hipped roof that breaks up the horizontal line. The houses have low-key fronts that provide privacy from the street and opens up in the back, which created a new way of living. The Ranch style house was an invitation to live intertwined with one's family and with the outdoors. (Samon, 12)

The earliest Hispanic Contributions to the Ranch house as it is known today are traced to the 1920s in the West, around the time that Mexico gained independence from Spain. Grand Ranchos appeared on the scene at that time because of the secularization of great areas of mission land, intended to be returned to the Indians but ending up primarily in the hands of well-placed Mexicans. The value of the lands included cattle, agricultural systems, and aqueducts. Raising cattle was the primary occupation of the Californians during the pastoral period, 1920-1960. (Samon, 12)(May, 11)

Made of adobe the ranch houses of the Spanish period tended to be low and spreading, in a "L" or "U" shape, sometimes even 2-story. They had an outside "portale" or corridor, a covered porch that wrapped around the outside of the structure or around an interior courtyard. The portale was their access from one room to another – there was no interior hall. It was tradition in the Hispanic domestic arrangement to have extended families in the house and to have single rooms, so this setup allowed privacy. It also provided protection from sun and rain and provided a gather place. (Samon, 12)

Echoing the flat planes of the prairie, the houses were compatible with their environment. They had gently sloping roofs and an emphasis on horizontal lines. Extended terraces were used for second floor rooms, and a generous use of French doors connected the house to the outdoors. Interiors were more of an open plan, allowing rooms to flow together. (Samon, 13)

As early as the mid-1930s, California Architects began to experiment with new housing styles. Architects such as Cliff May looked for closer relationship between the outdoors and the interior and a more intimate association with the garden. He designed homes in the San Diego and Los Angeles area, and was a builder, designer and promoter of a more informal, relaxed way of living.

Cliff May talks about the early Spanish Rancho houses as an inspiration to his relaxed, 1930s residential designs; "The rancho was the heart of the economic life of the province because cattle raising was almost the sole occupation of the colonists. It was during this golden era that the ranch house reached its finest development." (May, 8)

The Rancho house was low, with a wide veranda on the three sides of the inner court, and a broad one across the front, which looked to the south. These verandas, especially those on the inner court, were supplementary rooms to the house. (May, 12)

In its original form, the ranch house owned many of its qualities to architectural patterns that stretched back several centuries to the history of Spain. Some of its features came from the re-application of familiar building methods and materials in a foreign but familiar terrain. Those Spanish features included a plain roof and aloof facade on the public side of the house which had a precedent in Moorish the practice of decorating the interior and entrances (openings) on the exterior. The first houses in Spain were laid out flush to the street with a plain wall facing out and a garden in the rear. (May, 13-14)

Drawing from his knowledge and inspiration obtained by the Spanish Ranchos designs, May utilized four principals in his design of the modern Ranch house:

1. fitted to the site; blank façade to the public
2. built of natural materials
3. the patio is the key
4. corridor: original family room

May designed his Ranch homes low to the ground so that it looked as though “it grew in its setting.” A ground level floor permitted complete unifying of the outdoor and indoor space and he used one slab of poured concrete for the entire house. The low silhouette of the early ranch house was largely caused by the limitation of the poor load-bearing adobe materials that the Rancho houses were made of. Adobe limited the height of the walls. A single story house required a 3-foot thick wall to support its own weight and a heavy roof. The houses were set low because they had no foundations and their walls rested directly on the soil. (May, 14)

The large ranch houses rambled all over their sites and were usually contoured to the land. If the land was not contoured, the house was built on multiple levels and it would be connected by steps or ramps. The roofs were built on a mild slope for two reason; fewer hand made tiles were needed to cover a low gable than a steep one and the light and infrequent rainfall made steep roofs unnecessary. The eave line was brought quite low to permit a deep overhang that would protect the adobe from the rain and keep the summer sun off. (May, 14)

The rancheros were built with adobe bricks as the padres had done before them because labor and dirt were plentiful. The walls were made of adobe and the floors were dirt, as timber was difficult to fell, transport and dress into finished lumber because it was located far from the settlements in the Southern California lands. The ceiling beams were not made of dressed wood and the roofs varied from thatch and tules to familiar curved tiles. During the early years, only the wealthy used tile, later the houses were covered with recycle church roofs. Although most of the early rancho residences were constructed from adobe brick, later wooden shingle and board and batten walls were influenced by the Yankees.

Cliff May and other California architects made use of abundant native materials such as adobe bricks, stone, quarry tile, rough sawn lumber and hand split shakes and battens to emulate the ranchos. The designers of the 30s, 40s, and 50s had many materials to choose from. The Design came from the restrained use of simple, indigenous materials and the choice of uneven textures (in contrast to the smooth surfaces of office, store, and factory designs). (May, 19)

The patio was considered a key element by May. The patio provided an indoor/outdoor living space. The concept was brought to Spain by the Moors and to California by the Spanish. It was appropriate for warm climates and the inner court revealed architectural detailing and plantings and would often times have a fountain. The houses were generally designed around the inner courtyard with the arms of the house enclosing three sides of the court. The fourth side was left open or was closed with a garden wall. This type of design was referred to as a “U” shaped plan. Smaller houses would only have two wings, forming an “L” shaped plan. The patios almost always faced south. A corridor was used to connect the patio to the rest of the house and consisted of an open-air hallway surrounding the patio and served as a sheltered lounging area.

The wings of the house were compartmented into simple activity zones surrounding the patio. The living and dining rooms would occupy the face of the building and the bedrooms were located in the wings. The kitchen was usually located in the distance. Each wing was only one room deep and there were no interior hallways, so to get from one room to the next, one would have to enter the courtyard area. One had free access from any room in the house to another room.

The Ranch style homes of the 1930-50s replicated the form of the Rancho houses. They included large expanses of glass and sliding doors and a patio that extended to include more outdoor rooms. In contrast to their 1860 counterparts, the modern ranch houses had outward spreading wings as opposed to the right-angled wings of the Rancho houses.

The Spanish corridors were the original outdoor family rooms that afforded the only means of moving around the house. It worked for the Southern California Ranchos as the warm, dry weather allowed for its use. Later, California architects implemented the use of glass to allow for more versatility within less mild climates. The corridors faced the garden of the inner court and provided a casual social center and supplementary living room. The later designs of the Ranch style implanted covered patios, terraces, veranda, loggia, or porches. A new concept that evolved from the early concept of the corridor was the use of connecting covered walkways between buildings and entrances into motor courts. More modern corridors were also used to connect wings of the house and exposed walls were glassed in.

Although the Ranch style house in its modern form was first designed in the mid-1930s, the house form evolved and became the predominant house form for more than five decades. This may be because of the informal living that the house promoted or the



fact that it was “unobjectionable, homey and practical.” Since its inception, the Ranch house has obtained many names over the years including “Ranch-style, ranch bungalow, Ranchette, rambler, California colonial and ranch burger.” (Bricker, 2)

Residential building for much of the period between 1945 and 1970 was characterized by a competitive sales market for such “tract” houses, since the demand for affordable housing remained relatively steady and public financing was offered at reasonable rates. By the 1950s, the Ranch style house had become the predominant choice for the detached, single-family residence, a position it held into the 1960s. Although the styles varied among the Ranch houses, the essential features of the Ranch house remained dominant; a low rectangular form and a sense of informality.

### **III. Building/ Structure Typologies (examples and complete descriptions)**

#### **A. Building/ Structure Types**

There are several resource types located around the project study area, many of which reflect the predominantly agricultural use of the region. Some of the built resources that surround the area include rail lines, unoccupied land, military facilities, transmission lines, an airport, and energy facilities. Some of the resources located within the study area include open space, windmills, a canal, irrigation systems, residential buildings, milk parlors, barns, associated out buildings, silos, hay shelters, settling ponds, agricultural fields, wheat crops, tool sheds, well houses, a stockyard and auction facility, a grange, meeting hall, churches, nurseries, small commercial buildings and agricultural organizations.

Almost all of the properties located within the project study area consist of dairy properties. The dairy properties can include multiple parcels and multiple resource types. There are three predominant building types within the project study area. They include Ranch style houses, dairy parlors, and pole structures. Usually the dairy properties will have, at the minimum, a single-family residence and a milking parlor (barn). Often times, one property will have more than one residence. In addition to the residences and milking parlor, the property often contains outbuildings and pole structures. Following is a description of each major resource types:

**Single-family residence** - a building that was constructed as and is used for the sole purpose of housing a family unit. The single-family residences are constructed in various architectural styles but are predominantly designed in the Ranch style. Within the project study area, many properties may have as many as three large single-family residences that appear to be inhabited by all members of the same family. The single-family residences that belong to the same property are almost always painted in the same color scheme and are often times constructed in the same architectural style using the same materials. When there are more than one residence located on one property, then they often times flank the milking parlor. A few properties have buildings

that are smaller in scale than the primary residence and might be located in an adjacent corner of the parcel or a fair way away from the main residence. In these cases, it appears that the smaller residences are for the purpose of worker's housing, and although are related to the greater dairying operation, are not geographically close to the family's residences.

**Milking parlor** - a barn and building that are used for the extraction of milk from cows. The parlor consists of two sections, which include a front section that houses the milk storage/cooling tanks and a section behind that consists of a series of bovine stalls. The rear portion of the milking parlor consists of two lines of stalls flanking a central alley. The cows enter the parlor and file one at a time into the stalls such that their teats are facing the central alley. The cows are milked in this fashion from the central alley and the extracted milk is pumped into stainless steel storage and cooling tanks located at the front of the milk parlor. The front section of the milk parlor faces the street and has a small opening at the bottom of the central door, by which milk trucks can attach a hose to in order to pump the milk into the trucks without the milk ever being exposed to the air. Most of the milking parlors have a concrete circular driveway in front of the parlor to accommodate the large milking trucks entering and exiting the premises.

There are two types of milking parlors present within the New Model Colony study area. The first is the earliest model and is referred to as a "**flat style**." This was a long, flat barn with two rows of cows facing each other. Milkers would come in behind the cows and kneel behind the cows to wash their udders and hook up the automatic milking equipment. Most of the milking parlors of this type appear to be constructed in the Art/Deco or Art Moderne architectural style, to be described in the next section.

The second type of barn architecture is referred to as a "**herringbone**" style. In this style, the cow's stanchions are placed at an angle in order to use space more efficiently and the cows climb a gentle grade from the floor into their stall so that when the milkers come along, they do not have to kneel because the cows are at an elevated height. This is a labor and time saving device because it eliminates the amount of time it takes for milkers to kneel down to access the udders of the cows. Most of these milk parlors appear to be constructed in the Ranch style of architecture, to be described in the following section.

Another predominant resource type is the **pole structure**. The pole structures are made of wood and consist of a series of large poles placed vertically into the earth in geometric rows. There are wooden cross braces and roof that is covered by either corrugated sheet metal, wood, or rolled canvas awnings. The sides of the pole structures are open to the air. The purpose of the pole structures are to shade the cows under the hot sun, to cover feed such as stacks of bailed hay, to house farm equipment such as dairy tractors and trucks, or to store loose feed in bins. The pole structures are almost always constructed in a series of equally spaced rows behind the milk parlor and residences and serve a variety of functions.

Aside from the three major types of resources located within the project area, there are also a number of auxiliary buildings and objects. Some of the objects include grain silos, milk storage units, stanchions for harnessing the cows, and breeding pens and small calf corrals, etc. These objects are not individually called out as part of this survey, but are generally referred to as “additional farming or dairy equipment or facilities.”

## B. Architectural Styles

Most of the project study area is homogeneous in dates of construction and property types/styles. There are a handful of buildings that pre-date 1930 that are constructed in the Craftsman or Victorian influenced styles. These buildings are located in the previous peripheries of Ontario and Chino along Euclid Avenue and Riverside Drive in the western and northern sections of the NMC project study area. There are a few of these buildings scattered throughout the project study area, but no clear concentrations that might comprise a district. The majority of the buildings date to the mid-twentieth century (late 1940- late 1960s), are constructed in the Ranch style, and consist of large dairy operations with appurtenant related facilities and buildings.

There are a few milk parlors located within the study area that are similar in architectural style and use. These buildings are constructed of concrete block with glass block windows, a central entrance, and have Art Deco/Streamline Moderne influences. These buildings were most likely constructed between 1920 and 1940 due to their use of Moderne-type features such as their rounded corners, their use of glass block, and some of the horizontally arranged design motifs.

The architectural styles or architectural influences that have been identified in the study area include:

1. Victorian (1870-1915) and Italianate (1890-1935) influences
2. Craftsman Bungalow style (1905-1930)
3. Art Deco/ Art Moderne style (1920-1940)
4. Minimal traditional style (1930-1960)
5. Ranch style (1935-1990)
6. Utilitarian buildings (no specific date)

The majority of the earliest buildings (constructed prior to 1925) that are located within the study area are constructed in the Craftsman Bungalow style, although a few of these building have a few remnants of folk Victorian or Italianate influences from the previous era. The number of buildings within the study area that represent this style is approximately 5%.

Elements of the **Victorian** style that are evident in the study area include front gable roof or gable front and wing building form, moderate to steep pitched roof, paired brackets under the eaves, basic house with a simple fold house form, decorative porch

supports, gingerbread or decorative siding under gables, irregular or intersecting roofline, tall narrow windows with wood surrounds, boxed or open eaves and pyramid style roofs. Some of the buildings that exhibit the Victorian influences have been altered or “modernized” such that their Victorian roots are obscured, or the buildings also display elements of the Craftsman period, demonstrating a shift in architectural preference from the Victorian and Italianate buildings to the Craftsman style. There are no pure examples of this form within the project area.

There are not any buildings within the study area that exhibit a true representation of the **Italianate** style, however a few of the following design elements are seen on a few of the earliest residences; low-pitched roof, classical columns or pilasters, symmetrical façade, wide overhanging eaves supported by decorative brackets, quoins, and multi pane windows.

Characteristics of the **Craftsman Bungalow** style that are evident within the project study area include low pitched gable or hipped roofs with wide open eaves and exposed rafters, large gable or shed style dormers, the use of natural materials such as wood and stone, full or partial width porches supported by tapered square columns or piers, sloping or battered foundations, extended beams or triangular knee brackets under the gables, wood cased windows arranged in pairs or trios with multi pane double hung windows, and wide entry doors with geometric glazing. There are a few pure examples of this style within the project area and a couple of fine examples with cobblestone foundations that are located within close proximity to one another. A few of the Craftsman buildings have been altered and have lost their architectural integrity.

There is a handful of milking parlors that were constructed between 1920 and 1940 within the project study area that are unique in design. These milking parlors exhibit **Art Deco** or **Streamline Moderne** architectural styles. This group of buildings makes up approximately 7% -10% of the project study area.

Elements of the **Art Deco** style that are represented in the milking parlors constructed during this period include square, boxy, symmetrically arranged buildings with geometric and angular edges, a central bay that protrudes from the main elevation, a central vertical projection, smooth stucco wall surface, flat roof, and chevrons or zigzags. The group of buildings that exhibits the more art deco details was most likely constructed between 1920 and 1930. There are a few pure exhibits of this form.

Many of the milking parlors transitioned into the **Streamline Moderne** style of architecture between 1930 and 1940. Example details that are exhibited in the project study area include smooth stucco wall surfaces, flat roofs, a small ledge at the roof line (coping), curvilinear corners, horizontal grooves and lines, a central vertical projection, glass block windows, and windows that turn a corner. Many of the milking parlors exhibit this style, although some show elements of two styles, showing a transition between the art deco and streamlined styles or a shift from streamlined style to some later influenced designs. A couple of the milk parlors have been severely altered and a few have been adapted to new uses.

In addition to the styles previously mentioned, there is a small group of residential buildings that were constructed in the **Minimal Traditional** style. This style is representative of the buildings that were constructed during the depression and exhibit minimal decoration. Approximately 3% of the project study area exhibits this style. Some of the design elements indicative of this style that are evident within the project area include, small one story, modestly-sized plans with moderately-pitched multi-gable or cross gable roofs, shallow or clipped eaves, a large chimney on the gable end, minimal decoration, wood horizontal drop siding or smooth stucco finish, circular or octagonal windows, small concrete stoops with small cantilevered or projecting overhanging porch covers, wood cased multi-light double hung windows or metal casement windows, windows on corners, and metal window awnings. There are a few buildings designed in the minimal traditional style that continue to exhibit a pure representation of this style. A couple minimal traditional style residences have been extended or added onto such that they now exhibit more of the rambling character of the Ranch style than their modest roots.

The most prevalent architectural style present within the project study area is the **Ranch style**. This style is seen in both the residential architecture as well as the later (1950-1990) milking parlors. There are three distinct phases of the Ranch style that are represented in the project area. The first group of Ranch style buildings are representative of those constructed prior to 1959. The second phase includes those constructed between 1960 and 1980. Finally, the third group of Ranch style residences was constructed after 1980 until present. The Ranch style of architecture comprises near 75% of the project study area. The percentage that each subgroup makes up is unknown at this time.

In addition to the differences in construction techniques and materials evidenced by the three phases of Ranch style construction, there also appears to be some influences that may be derived from the various ethnicities that populate the area. Although all of the materials that are used within the project area are common materials that were used in the Ranch style of architecture, certain applications of design elements and combinations of materials suggest either Dutch or Portuguese influences. I will call out what the elements and material are, however the inference that these influences were ethnically derived is merely speculative for the purpose of this reconnaissance survey. More research and verification is necessary to substantiate this hypothesis.

The Ranch style of architecture exhibits many design elements that are consistent throughout the study area. These characteristics include one story, large expansive, horizontally emphasized rambling plans, low-pitched gabled, hipped, or intersecting gable roofs with expansive overhanging open or boxed eaves, wood shingle roofs, “U” shaped, “L” shaped or “S” shaped plans, attached garages, breeze ports and covered walkways, wide prominent chimneys, integral or recessed front porches, concrete slab foundations, large picture windows, plain post porch supports, wide entry doors or French style stylized paneled front entry door, sliding glass doors facing the rear of the residence, and an emphasis on outdoor space via an orientation of windows toward a

rear patio area. Some of the roof forms consist of a gable over a hipped roof or a “widow’s peak” design. Many of the early Ranch style residences have small square cupolas projecting from their roofs.

The most predominant elements of the **pre-1959 Ranch style** residences that are located within the study area include wood shingle roofs with wide overhanging eaves and wood-cased multi-light windows. Some of these buildings have either square or diamond pattern lights (individual pieces of glass separated by wood mullions) on the windows and some of the buildings have glazed and paneled doors (nine lights in either a diamond pattern or square pattern over one large panel or a cross-buck style door). The main entry door is generally a single width (approximately 3 feet) glazed and paneled door. The use of a combination of siding materials was popular during this period. The most popular siding materials for Ranch residences constructed during this period is horizontal wood siding combined with board and batten siding and smooth stucco with some type of contrasting treatment along the footing of the main façade that extends about two to three feet from the ground (water table). The contrasting material is often brick or a rock (flagstone) veneer. Sometimes the water table is sided in wood horizontal drop siding and the rest of the house is board and batten siding or smooth stucco. The siding treatment under the eaves is also usually contrasting to the predominant siding material and may match the treatment used for the water table (such as horizontal drop siding). Several of the Ranch style houses from this period have small square roof top cupolas projecting from the gable line with a matching hipped or pyramidal roof. Many of the cupolas have many small square or arched openings with horizontal wood perches that replicate birdhouses. Another design feature of the earlier Ranch style houses that does carry over into the 1960s is the use of small projecting rectangular bays on the principal facades. These bays consist of large rectangular boxes that project about a foot from the principal elevation and are covered with windows. The bays are usually covered in contrasting siding materials, much like the water table and gable ends. Many of the windows have multi-lights and are arranged in groups of three windows with two smaller double hung or casement windows flanking one larger multi-light picture window, or just one large picture window.

In the **1960s through 1980s Ranch** houses located in the study area, the roofing material, window styles, and materials changed in the mid- to late century. The buildings from this period utilized the newer “modern” building materials of the day; they began to be covered in asbestos shingles, asphalt shingles, or a composition roofing material. The windows too changed from wood cased to aluminum cased sliding windows. The picture windows that are a quintessential element of the Ranch style house changed from multi-lights or combinations of three windows to one large picture window with a single pane of glass. Other changes from this period include a shift from a single car garage to an attached two-car garage, plain metal or wood post porch supports, and concrete slab front porches located under a long narrow shed roof attached to the principal roof or recessed within the central bay of the building. The implementation of siding materials also changed during this period. There seemed to be less of an emphasis placed on the use of contrasting siding materials. Many of the residences from the period have a more homogeneous exterior surface. Many of the residences



from the period are entirely of smooth or rough stucco and so not have a water table called out. Other buildings still use stone and masonry in their designs but the stonework appears to be more integrated and less of an appliqué (veneer). Some of the more elaborate Ranch style residences from this period use the same type of stone in arch patterns around the walkways, within the fence surrounding the property as large surrounds around the main entry and windows. The main entry doors from this period shift from a single door to wide stylized double doors with ornate panels, carved glazing and ornamental oversized hardware. However, in contrast to some of the architect designed Ranch buildings from this period, most of the residences from the 60s through 80s are less ornamented, with simple smooth siding or homogeneous siding materials, horizontally arranged aluminum sliding windows all sheltered by an expansive low pitched gable or cross gable roof. The Ranch style residences from this period appear to lose their ornamentation, complex multi-light windows and appliqué as the century progressed into the 1980s. Some of the 1960s Ranch style houses still have projecting bays with large picture windows, but are often covered in the same siding as the rest of the house.

The last period of Ranch style buildings that are present within the study area are those that were constructed after 1980. The basic concept of this group of buildings draws closely to its predecessors; however there are a few design elements that are indicative of the latest part of the twentieth century. Some of these design changes include the preference of clay tile roofs and again, new technologies in windows. Some of the Ranch style buildings from this period are larger than earlier examples, may include split-levels, and implement more contemporary and shed building techniques. In some cases, the siding is diagonal or uses wide board trim, window surrounds, and false half-timbering. Other examples derive their influence from Spanish Colonial Revival styles. Regardless of the specific design motifs, this group of buildings exhibit large, unique combinations of architectural design and appear to be statements of wealth within the dairy industry. This subgroup of Ranch style buildings is familiar to us all and has not been classified or studied academically as it is still considered relatively new architecture.

Within the group of Ranch style buildings, there are several design elements used that appear to be of a Mediterranean (Portuguese) or a Northern European (Dutch) influence. It appears that if these buildings were constructed by certain individuals from either Mediterranean or Northern European descent, that they might have chosen design features that are indicative of their origins. Most of the design features that are found on Ranch style buildings within the study area can be found in other places within the United States as well; however, the choices of features that were made by an individual may exhibit what ethnic group occupies the property.

Some of the design features that appear to be of **Northern European (Dutch) influence** include windmills, scalloped barge board, extended eaves, square cupola with perches and pyramid roof protruding from the roofline, diamond pattern windows, window boxes, carved balusters and faux balconies, carved or curved knee brackets supporting the roof, extended roof girders, louvered or paneled shutters, scalloped

horizontal wood frieze board under the gables, spindlework or turned porch supports, and gambrel roofs. A few of the residences also have small statues or lawn ornaments exhibiting Dutch milkmaids or characterized Holstein cows.

Some of the design features that appear to be of **Mediterranean (Portuguese) influence** include heavy carved or cast stone work, decorative ironwork railings, window grilles, fences, or shutters, terra cotta tiles, rough stucco, flat, mansard or multi-gable roofs, large arched openings, arched window and door surrounds, arched colonnades and breezeway between house and garage, the use of dark, natural material, brick, flagstone or other stonework.

The last group of architectural styles that are present within the project study area includes **utilitarian buildings** and structures. This group consists of those buildings and structures that do not have a definable architectural style and may include, but are not limited to, pole structures, out buildings, garages, utility sheds, vehicle covers, warehouses, calving stalls, feed bins, silos, cooling tanks, or otherwise. Most of these buildings are agricultural and utilitarian in nature and are seen in great numbers within the project study area. They may be noted on individual evaluation forms, but little description is given due to their utilitarian nature.

## IV. Identified Historic Contexts

Historic Contexts are those patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within prehistory or history is made clear.

Utilizing the information gained in the historical overview, there are several historic contexts that were defined after the preliminary historic research was completed. As opposed to the research themes, the historic contexts are more specific to the properties and resources located within the study area and are derived from comparing the built environment present to the information gained from researching the area's historical development. The historic contexts define how each property will be evaluated for historic significance in the future.

Following are the historic contexts that represent the broad patterns of historical development of the NMC area that are exhibited in the built environment present:

- Pre-1930 rural residential or free-grazing dairy property,
- Art Deco or Streamline Moderne Milk Parlors (circa 1920-1940),
- 1930-1949 dry lot to mechanized dairy properties,
- Post-1950 scientific large capacity dairy properties,
- Commercial property or dairy support industry or other,
- Ranch style houses,
- Craftsman style houses,

- Buildings with Portuguese design influences, and
- Buildings with Dutch design influences.

## **A. Connecting Building Typologies to Historic Contexts**

After conducting the historical research on the development of the NMC area and the reconnaissance survey, the survey team was able to make links between the historical themes and the resources present. For example, the three distinct phases in dairy farming of Southern California are physically represented within the project study area by the types of resources located on each property and the physical relationship to one another. However, although the historical research covered the early history of the NMC land use and a brief overview of the development of the adjacent communities, these research themes were not developed into relevant historic contexts for the purpose of this survey because it does not appear that there are any properties present within the study area that distinctly represent associations to those historical patterns. Additionally, more information is necessary in order to develop a more concrete historic context for those properties associated with the various ethnic groups.

However, for those historic contexts that were defined and relevant to the resources present, the following section will provide guidance as to identify and evaluate properties within each relevant context. This next section, includes a framework for the City to use as a guide when evaluating the properties within the NMC at a future date. Under each of the following subheadings, the following information is provided:

- A brief description of the historic context as it relates to the historical development of the project area,
- The description of the physical layout of the resource types that comprise a property representing the historic context,
- A description of how the layout of buildings and structures tells a story about how the property fits into that context,
- A discussion of the minimum characteristics that are necessary to identify the property as associated with that historic context, and
- Examples of three properties that fall within that historic context that exhibit a range of integrity levels (high, moderate and low) for reference while evaluating properties of each type in the next survey phase.

### **1. Pre-1930 Rural Residential or Free-Grazing Dairy Properties**

The first phase of dairy farming in the Chino Valley occurred between 1900 and 1930 and consisted of free grazing the cattle. The dairies before the 1930s were small family concerns consisting of five or six acres. The dairies were concentrated around the peripheries of major metropolitan centers to service the areas with the largest populations. Eventually, this period witnessed the change from free grazing dairying to

dry-lot dairying. In the 1920s, there was a move by specialized dairy farmers to larger herds and imported feed. Dairy operations of this sort were scattered around San Bernardino and Los Angeles Counties, but there was a large concentration of dairy farmers of Dutch and Portuguese decent that had mainly settled around Hynes-Clearwater area which today is known as Paramount.

### ***Associated Property Types***

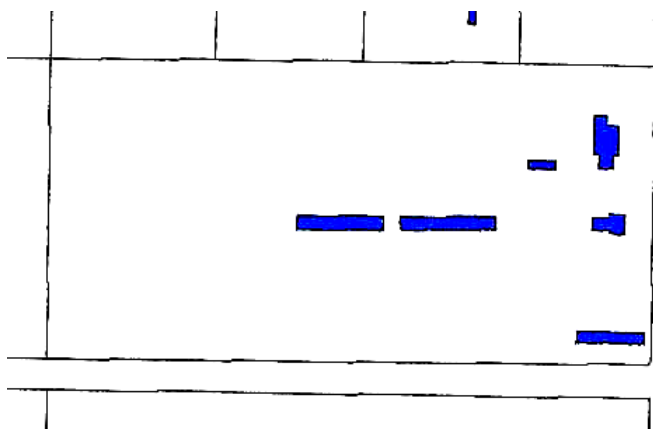
A property developed during this period is located on a relatively small lot (in comparison to the average parcel size present within the NMC study area), consisting of less than nine (9) acres. It is likely located near Riverside Drive or Euclid Avenue or a few streets south or east from these major arterials, as these areas historically made up the periphery of Ontario to the north and Chino to the west. Properties that represent this period have very few dairy buildings and structures located on the property due to the fact that the cattle were allowed to range free within the fields. Also, many early dairies in the NMC area leased the land; therefore the dairy operations may not have left evidence of residential buildings behind if the dairies were not operated and homesteaded by the parcel owner. However, for those few properties from this period that remain part of the built environment, one can find one or two residences, a detached garage, a modest dairy building, and an expanse of open space.

The residences that are located on a Pre-1930 dairy property were constructed in the architectural styles that were popular during the day; either folk Victorian or Craftsman. A few may exhibit influences from other revival styles such as Italianate or Spanish Colonial Revival, although these styles are not highly represented within the NMC area. A detached one-car garage would be likely constructed in proximity to but to the rear of the main residence. The garage might be constructed in a similar architectural style as the main residence. It would likely be of timber frame with a simple gable or hipped roof and would have one lift up garage door or no door at all.



There might be at least one dairy building on the property, which would likely be a large wood barn or a small one story concrete block milking parlor. The large barn would likely be set back from the main residence and might be a transverse crib barn or simple barn with loft. There are less than a dozen of these

types of barns located within the NMC project study area. These barns may represent non-dairy agricultural operations as well. However, some of the pre-1930 dairy properties do have early milking parlors constructed in the “flat style.” The dairy parlors are modest in size and designed in the Art Deco or Art Moderne styles. These small dairy operations have a circular driveway in front of the milk parlor and often have designed landscaping to complement the dairy parlor. There are no other dairy facilities such as pole structures, silos, bins, stalls, etc. associated with this property type.



The physical relationships of resources within the property boundaries demonstrate how the early dairy farmers lived. The dairies were run by a single family who lived and worked on the land. The absence of dairy buildings demonstrates how the cows were allowed to free range within the field and the farmers would corral the cows to milk them. Around the turn of the century the milking may have



been done in the large barns and later, closer to the 1930, in the modest milking parlors. The barns also may have been used to store hay and grain to feed the cows during the winter months. The single car garages represent the fact that the dairy farmers did have automobiles, after Henry Ford’s assembly line approach made vehicles more affordable to the masses in 1908. However, it was not common before 1930 for families to have more than one automobile; therefore the garages are only large enough to house one vehicle. The presence of some early “flat style” milking parlors demonstrates the switch from free grazing dairies to dry-lot dairying. The dry lot method of dairying was the first attempt at mechanizing the milking process. The cows were still milked by hand prior to 1930, but the cows were contained in stalls and fed as they were milked. The size of the dairy operations were still relatively small, limited to less than 100 head of cattle, due to the limitations of hand milking the cows.



The switch from the large barn to a milking parlor not only demonstrates the changes in the increase of milk production but also in the change in the cleanliness standards of the milking operation. Towards 1930, the city and state officials began to fight diseases such as tuberculosis by passing sanitation requirements for the dairies. The new milking parlors were constructed of concrete block with smooth stucco finish and had concrete stalls for the cows to stand in. The cows were washed before being milked. The milk was then housed in the front of the milking parlor in large storage tanks and kept at a constantly cold temperature until expressed into the milk trucks for delivery. The milk trucks even utilized the circular driveway in front of the milking parlor at this time.



Some of the early milking parlors still exhibit ghost signs of the name of the dairy operation that once occupied the building. Some of the signs call the operation a creamery or condensory. The significance of this is that it demonstrates how each dairy would not only milk the cows but would also process their own products for market. Some of the early dairies would actually sell their milk and products right from the dairy; customers could just drive up to the front of the milk parlor for their goods.



There are relatively few properties in the NMC study area that are associated with this historical context. This is due to the fact that dairying at this time was still largely concentrated around the Artesia area of Los Angeles County. Refer to Appendix A for a list of properties that may fall within this historic context.

***Character Defining features and Integrity Considerations:***

The minimum characteristics that are necessary to identify a pre-1930 dairy property as associated with its identified historic context are; a residence that dates to the period 1900-1930 in an architectural style that exhibits little alteration, a barn (either a crib barn, large barn with loft, or early milking parlor, or one of each), a circular driveway, and open space to the rear of the property. The property could have a detached one-car garage, but this characteristic is not essential.

A pre-1930 dairy property that exhibits **high integrity** is a property that exhibits the minimum characteristics of a property identified as having an association to this historic context. The property will have no modern intrusions (buildings, structures, objects that date outside the period of significance 1900-1930). The individual elements will possess high integrity individually (retain their original materials, design, workmanship, feeling, association, and location) and the property will possess integrity as a whole (the elements will retain their original locations and physical relationships, the open space will remain intact). The buildings and structures will retain their original uses or may be abandoned but should clearly depict their original operational uses.

A pre-1930 dairy property that exhibits **moderate integrity** is a property that exhibits the minimum characteristics of a property identified as having an association to this historic context. The property as a whole will possess their original locations and physical relationships; however, the individual elements may have lost some of their historic integrity. For example, the minimum characteristics are present but the roofing material and windows have been replaced on the residence but it can still be identified as a Craftsman style building. The milking parlor remains intact but is currently being used as storage, but no physical alterations have occurred on the milking parlor. The property continues to convey its historic association with the 1930 dairy property context, but has a few minor alterations.

A pre-1930 dairy property that exhibits **low integrity** is a property that does not exhibit the minimum characteristics of a property identified as having an association to this historic context. One or more of the major characteristics is missing. There may be additional buildings that do not date to the period of significance 1900-1930. The property as a whole lacks integrity of location, design, setting, association, feeling, materials, and workmanship as well as the individual resources lacking integrity. For example, the residence has had the porch enclosed, the windows replaced, the wood siding covered in rough stucco, a large addition off the side of the residence, and a new roofing material. The milking parlor has had the original glass block windows replaced with aluminum sliding windows and the front door replaced with a metal security door and the building is currently being used as an auto shop. There is an addition of a

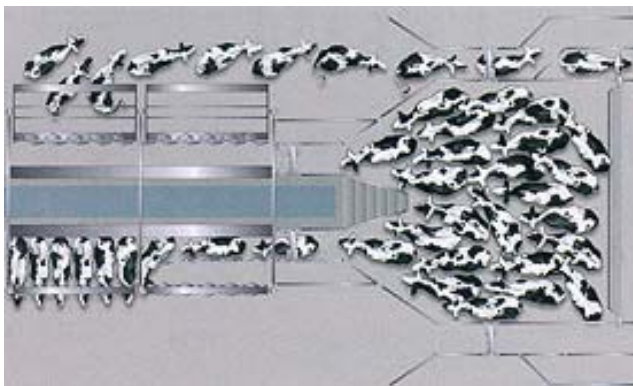
manufactured home and a pre-fabricated 6-bay garage on the property. The property no longer conveys its historic association as a pre-1930 dairy property.

## 2. Art Deco or Streamline Moderne Milk Parlors (Circa 1920-1940)

As mentioned previously throughout this report, there is a small grouping of “flat style” milking parlors that were constructed between 1920 and 1940 in the Art Deco or Streamline Moderne Style. These milking parlors are a unique building type and may exhibit the largest concentration of their type in Southern California. Because the milking parlors were constructed for the very explicit purpose of milking cows, their design represents those functions. Their significance is derived from both their building type and their uniform architectural styles. This property type represents two important changes in the dairy industry; the earliest development of the mechanization of the milking process (the dry-lot method), and how the changing ideas in sanitation standards imposed by local and state officials for the battle against the spread of disease influenced the choice of construction materials and architectural styles that were used for the milking parlors.



The “flat style” Art Deco or Streamline Moderne milking parlors are buildings that were used for the extraction of milk from cows. These parlors consist of two sections; a front section that houses the milk storage/cooling tanks and a section to the rear that houses two rows of cow stalls flanking a central alley. The cows enter the parlor and file one at a time into the stalls such that their teats are facing the central alley. The cows were milked in this fashion from the central alley and the extracted milk was pumped into stainless steel storage and cooling tanks located at the front of the milk parlor. The front section of the milk parlor faces the street and has a small opening at the bottom of the central door, by which milk trucks can attach a hose in order to pump the milk into the trucks without the milk ever being exposed to the air. Most of the milking parlors have a concrete circular driveway in front of the parlor to accommodate the large milking trucks entering and exiting the premises.



Most of the milking parlors have a concrete circular driveway in front of the parlor to accommodate the large milking trucks entering and exiting the premises.

These properties represent the switch from the large barn to a milking parlor, which demonstrates the changes in the increase of milk production and in the cleanliness standards of the milking operation. In the 1930s, the state actively fought tuberculosis rampant in the dairy herds by passing sanitation requirements for the dairies. County and city health officials enforced the state sanitation standards for the dairies and creameries with frequent inspections. The new milking parlors were constructed of concrete block with smooth stucco finish, had concrete stalls for the cows to stand on and concrete floors so that the entire milking parlor could be hosed down. The cows were washed before being milked and the milk was kept in the front of the milking parlor in large storage tanks at a constant cold temperature until expressed into the milk trucks for delivery. The milk trucks utilized the circular driveway in front of the milking parlor. The Art Deco and Art Moderne milk parlors reflect the ideals of a clean and sanitized parlor. The clean, smooth lines of the Art Deco and Streamline Modern style milking parlors advertised the impression of an uncontaminated operation to the public.



The choice of Art Deco or Streamline Modern styles is not coincidental for an industrial-type building of this era. These styles, especially the streamlined style were heavily used for the design of ships, airplanes and automobiles. This period was an era of modernization and progress, two concepts that the new milking parlors were trying to promote. With the industrialization of the milking process (albeit an early effort), it is not surprising that the milking parlors would choose an architectural design that represented efficiency and progress, much like the ships, airplanes, and automobiles that served as the style's inspiration. In addition to emphasis on progress and industrialization during the 1930s, the concept of sanitation and cleanliness was equally important to society. Many appliances and interiors were designed with rounded corners, clean lines, and white enamel to promote the idea of a "clean environment." The government supported this concept by imposing sanitation standards for the processing of food products and conducting health inspections on a regular basis.

### ***Character Defining features and Integrity Considerations:***

Elements of the **Art Deco** style that are represented in the milking parlors that were constructed during this period include square, boxy, symmetrically arranged building with geometric and angular edges, a central bay that protrudes from the main elevation, a central vertical projection, smooth stucco wall surface, flat roof, and chevrons or zigzags. The group of buildings that exhibits the more art deco details was most likely constructed between 1920 and 1930.

Many of the milking parlors transitioned into the **Streamline Moderne** style of architecture between 1930 and 1940. Details of this architectural style that are exhibited in the project study area include smooth stucco wall surfaces, flat roofs, a small ledge at the roof line (coping), curvilinear corners, horizontal grooves and lines, a central vertical projection, glass block windows, and windows that turn a corner. Many of the milking parlors exhibit this style, although some show elements of two styles, showing a transition between the art deco and streamlined styles or a shift from streamlined style to some later influenced designs.

The **minimum characteristics** that are necessary to identify a 1920-1940 Art Deco or Streamline Moderne “flat style” milking parlor as associated with its identified historic context are a modestly sized, rectangular, two part, one story milking parlor designed in the Art Deco or Streamline Moderne architectural styles. The property must exhibit those character-defining features that are generally recognized with these styles, as described above. The property also must include a circular driveway in front of the building. It may include landscaping features, but these are not essential.

A 1920-1940 Art Deco or Streamline Moderne “flat style” milking parlor that exhibits **high integrity** is a property that exhibits the minimum characteristics of a property identified as having an association to this historic context. The property must retain both



sections of the parlor intact. The property must have at least 90% of it original exterior features and must have the glass block windows intact on the primary elevation. The circular drive will remain intact. The property will be easily identifiable as a property that exhibits this historical context. The property retains its original use or is abandoned but its original use is evident due to its lack of alterations. The property retains its historic location and setting, materials, design, workmanship, feeling and association.

A 1920-1940 Art Deco or Streamline Moderne “flat style” milking parlor that exhibits **moderate integrity** is a property that exhibits the minimum characteristics of a property identified as having an association to this historic context. The property must retain both



sections of the parlor intact. The property must have at least 50% of it original exterior features and must have the glass block windows intact on the primary elevation. The property may have a few minor alterations such as a changed entry door, the addition of a metal security door, a few replacement windows, or the addition of a small room or shed type room off to one side. The milking parlor may include additional equipment associated with the dairy industry such as a larger milk storage tank on the exterior or grain bins, etc. The circular drive will

remain intact. The property will be easily identifiable as a property that exhibits this



historical context. The property continues to convey its historic association but has a few minor alterations. The property retains its historic location and design, feeling and association, and the majority of its workmanship and materials.

A 1920-1940 Art Deco or Streamline Moderne “flat style” milking parlor that exhibits **low integrity** is a property that does not exhibit the minimum characteristics of a property identified as having an association to this historic context. The property does not retain

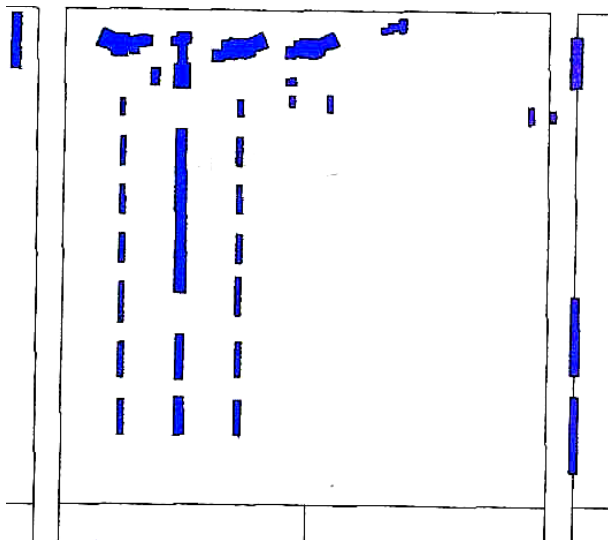


both sections of the parlor intact, or the property retains both sections but it has less than 50% of its original exterior features, the glass block windows on the primary elevation have been replaced, the entry door has been replaced, or the siding has been significantly altered. The property is identifiable as a property that exhibits this historical context, but the property’s integrity is so low that it does not look as though it would have during the period 1920-1930.

The property does not retain its original location and setting, design, workmanship, materials, feeling or association. The property is no longer being used as its original purpose, or does not display its original purpose

### 3. 1930-1949 - Dry Lot Dairying with Mechanization

The second phase of dairy farming in the Chino Valley occurred between 1931 and 1949. This second phase of dairying marked a change from free grazing dairying to dry-lot dairying with the mechanization of milking. This era saw many changes in three areas of the industry: 1) an increase in the number of cows, 2) an increase in population, and 3) legislative price fixing for milk. The early properties that developed during this period were still located on relatively small lots, consisting of less than nine (9) acres. As the era neared the Second World War and as the mechanization of dairying advanced, the size of the parcel increased, as the dairy farmer was capable of milking more cattle. The layout of the dairy property also changed as the dairy operation began to introduce new farming equipment for the mechanization process.



The physical relationship of resources within the boundaries of a property that was constructed between 1931 and 1949 demonstrates how the dairy farmers lived and operated their dairy farms during this period. These dairies were still operated by a single family who lived and worked on the land. However, they may include sons or daughter’s families, brothers, uncles, or the like. Therefore, as the dairy family grew, they would build an additional house on the property, and so too would the dairy operation grow as more hands were

available to run the operation. The geometric arrangement of the buildings and structures on the property demonstrates the shift of the dairy operation to a dry-lot method of dairying. The dry-lot method required a more mechanized approach to milking the cattle. This mechanization allowed for the dairies to grow in size as more cattle could be milked in a day.

The shift from single car garages to attached one or two car garages represent the changing importance that the automobile played in American society, as well as a status symbol for those who were able to afford more than one car. The properties with early two car garages may represent the more financially successful dairies during that era. The presence of the early “flat style” milking parlors demonstrates the change in the increase of milk production and the change in the cleanliness standards of the milking operation. The addition of multiple residences on these properties represents the multi-generational nature of the industry and the importance that the dairy lifestyle played in the unity of the family. The manicured landscaping and general condition and continuity of the properties demonstrate the pride that the dairy farmers had toward their profession and the pride they had in the hard work and diligence of building up their dairy operations. The milk trucks continued to utilize the circular driveway in front of the milking parlor to express milk from the storage tanks, but instead of the dairy selling the milk from the front of the parlor, the milk trucks would take the milk to condensories or refineries before being packaged for sale in the grocery store. A few of the dairies might have still supplied the whole milk to paying customers, but the majority was supplying milk to larger dairy operations for resale. The signs exhibited in front of the dairy operations exhibit the dairy association with which they were associated.

This era demonstrates the first wave of dairy farmers coming to the NMC area to dairy once areas such as Artesia and Dairy Valley began to be encroached by ensuing residential development. Also, additional dairy farmers may have come to this region during this time because their relatives or friends within their respective ethnic communities were already farming the area. Refer to Appendix A for a list of properties that may fall within this historic context.

### ***Associated Property Types***

Although scattered about the NMC study area, the majority of properties from this context are located on the western half of the project area near the prior peripheries of Chino and Ontario. Dairy properties that were constructed between 1931 and 1949 will have at least one residence, and often times more than one residence designed in a similar architectural style, a detached or attached one-car garage, an Art Deco or Streamline Moderne style milking parlor, some pole structures or small silos, grain bins, etc, and an expanse of open space. The residences that are located on the 1931-1949 dairy properties are constructed in the architectural styles that were popular during the day; either minimal traditional or early Ranch style.





A few properties may still fall within this context even if the residence was constructed prior to 1930, as the dairy farmer may have adapted an earlier dairy property to a mechanized dairy operation with the addition of a milking parlor. If the property was constructed in the 1930s or 1940s and has a minimal traditional residence, then the property will likely have a detached one-car garage that is constructed in proximity to but to the rear of the main residence. The garage would be constructed in a similar architectural style as the main residence, would likely be of timber frame with a simple gable or hipped roof, and would have one lift up garage door or no door at all.

If the property includes a residence that was constructed from 1940-1949 and has a residence that was constructed in the early Ranch style, then the residence may have an attached one or two-car garage or a garage that is attached to the house by a covered breezeway.



There will be a modestly sized “flat style” concrete block milking parlor constructed in the Art Deco or Streamline Moderne architectural style. If there is more than one residence, then the residences flank either side of the milking parlor. All the buildings that are related to a 1930-1949 dairy property will be painted in the same color scheme, even if the individual resources are not necessarily constructed in the same architectural styles.

These modestly sized dairy operations have a circular driveway in front of the milk parlor and often times have designed landscaping to complement the property as a whole, both in front of the milking parlor and in front of the residences. The property will also have other dairy facilities associated with the operation such as pole structures, silos, bins, stalls, etc. These resources are usually laid out behind the milking parlor and residences and are aligned in a geometrically spaced fashion; either perpendicular or parallel to the milking parlor. The pole structures are long and narrow rectangular structures. The number of pole structures and associated farming equipment may reflect the size and productivity of the dairy operation. Behind the pole structures there is a large expanse of open space. Many of the dairy properties from this era have signs in front of their operations exhibiting the Dairy Association that they are connected with.



There are a moderate number of properties associated with this period scattered throughout the NMC study area, but most are concentrated on the western half near the peripheries of Chino and Ontario.

### ***Character Defining features and Integrity Considerations:***

The **minimum characteristics** that are necessary to identify a 1931 to 1949 dairy property as associated with its identified historic context are at least one residence that dates to the period 1931-1949 in a Craftsman, folk Vernacular, minimal traditional, or early Ranch architectural style that exhibits little alteration, an Art Deco or Streamline Moderne milking parlor, a circular driveway, geometrically spaced rows of pole structures and other related dairy facilities, and open space to the rear of the property. The property would have either a detached garage or a garage attached to the main residence.

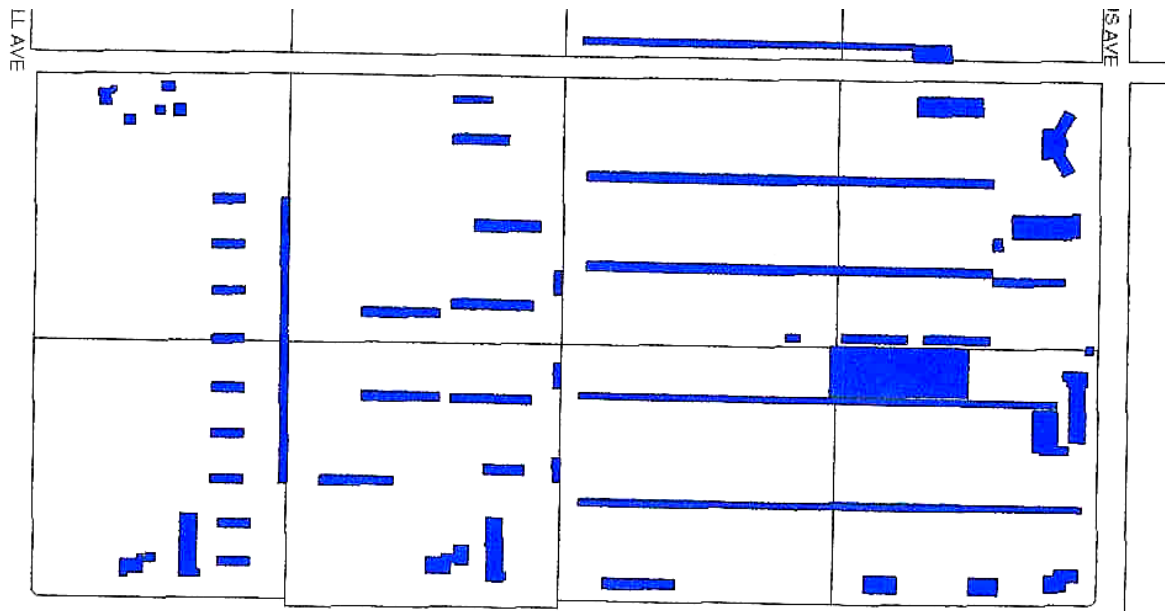
A 1931-1949 dairy property that exhibits **high integrity** is a property that exhibits the minimum characteristics of a property identified as having an association to this historic context. The property must have at least one residence that dates to this period or before and may have additional residences that were constructed after 1949, but the milking parlor must date to this period. The individual elements will possess high integrity individually (retain their original materials, design, workmanship, feeling, association, and location) and the property will possess integrity as a whole (the elements will retain their original locations and physical relationships, the open space will remain intact). The buildings and structures will retain their original uses or may be abandoned but should clearly depict their original operational uses.

A 1931-1949 dairy property that exhibits **moderate integrity** is a property that exhibits the minimum characteristics of a property identified as having an association to this historic context. The property must have at least one residence that dates to this period or before and may have additional residences that were constructed after 1949, but the milking parlor must date to this period. The property as a whole will possess their original locations and physical relationships, however, the individual elements may have lost some of their historic integrity. For example, the minimum characteristics are present but the roofing material and windows have been replaced on the residence but it can still be identified as its designed architectural style. The milking parlor remains intact but is currently being used as storage, but no physical alterations have occurred on the milking parlor. The milking parlor may have a replaced door, but the majority of the glass block windows must remain intact. The property continues to convey its historic association with the 1931-1949 dairy property but has a few minor alterations.

A 1931-1949 dairy property that exhibits **low integrity** is a property that does not exhibit the minimum characteristics of a property identified as having an association to this historic context. One or more of the major characteristics is missing. There may be additional buildings that do not date to the period of significance 1931-1949. The property as a whole lacks integrity of location, design, setting, association, feeling, materials, and workmanship as well as the individual resources lack integrity. For example, the residence has had the porch enclosed, the wood windows replaced, the wood siding covered in rough stucco, a large addition off the side of the residence, and the wood shingles replaced with a new composition roofing material. The milking parlor has had the original glass block windows replaced with aluminum sliding windows and the front door replaced with a metal security door and the building is currently being used as an auto shop. There is an addition of a manufactured home and a pre-fabricated 6-bay garage on the property. The property no longer conveys its historic association as a 1931-1949 dairy property.

#### **4. Post-1950 - Scientific, Large Capacity Dairies**

The third phase of dairy farming in the Chino Valley occurred between 1950 and 1969 and consisted of the introduction of scientific feeding and breeding, resulting in larger herds and more productive dairy operations. The dairy properties that developed during 1950-1969 are located on very large parcels or on properties that comprise multiple smaller parcels. The average size for a property associated with this context is approximately forty (40) acres or more. As the mechanization of dairying advanced, the size of the parcel increased as the dairy farmer was capable of milking more cattle. The layout of the dairy property also changed as the dairy operation began to introduce new farming equipment for the mechanization process.



The center for dairying in Southern California prior to this era was located around the Artesia area in Los Angeles County. However, due to the encroachment of the developing residential communities, the dairy farmers were forced to move to the Chino Valley area. In moving to the Chino Valley, the dairymen established the most efficient and modern dairies in the nation. In the old production facilities one man milked 100 cows twice a day. With the technology of the new milking systems (of the 1950s-60s) one man easily could milk 450 cows twice a day. During the 1950s and 1960s the use of machinery increased out of necessity because of the manpower shortage due to World War II. Machines could handle more cows, consequently, the herds increased in size again. The dairy farmers moved to new dairies to take advantage of mechanization, their old barns were not large enough for the new machinery. Also, the dairy farmers from this period were able to afford more land after selling their dairies for premium prices in the highly valued inner-city areas of Los Angeles County, and could consequently increase the size of their operations and upgrade their milking facilities as the cost of land in the Chino Valley area was far less costly.

***Associated Property Types***

The largest number of dairy properties within the NMC study area consists of dairy operations that are associated with this historic context. These property types cover the entire NMC project area, but the properties with the larger land holdings are concentrated on the eastern half of the study area between Archibald Avenue and Milliken Avenue and the larger properties made up of numerous smaller parcels are located on the western half of the project study area, south of Edison Avenue. This is due to the fact that these larger operations required more space and the areas to the northwest of the project study area consisted of smaller lots that were already occupied by the earlier, smaller dairies.



Dairy properties that were constructed after 1950 will have more than one very large residence, or a series of large residences that comprise at least one residence constructed after 1950 and enlarged residences from earlier periods, attached two car garages or garages attached to the residences by a covered breezeway, a large “herringbone” style milking parlor designed in the Ranch style, numerous pole structures, large silos, large milk storage tanks, breeding stalls, calf stalls, rows of stanchions, grain bins, etc, and a huge expanse of open space behind the dairy buildings that is used for the production of feed and the processing of manure.



These properties may also have additional small residences to house hired workers who live and work on the land which may be located near the family’s residences or may be located somewhere else on the property. These houses are generally small and may have been the original house from the early part of the century that was occupied by the dairy owner (or past dairy owners) prior to the proliferation and productivity of the current operation.

Almost all of the owner’s residences that are located on the post 1950 dairy properties are constructed in the Ranch architectural style of architecture; however, a few may be residences that were popular prior to that era, but may have been enlarged or remodeled to reflect the success of the more efficient dairy operations. Most of the worker’s houses are either very small examples of the Ranch style, or are smaller residences constructed in styles that were popular prior to this era. A few properties may still fall within this context even if the residence was constructed prior to 1950, as the dairy farmer may have adapted an earlier dairy property to a mechanized dairy operation with the addition of a large residence and large milking parlor.



This period exhibits a shift in the barn architecture from the “flat style” milking parlor to a “herringbone” style. In the new milking parlor design, the cow’s stanchions are placed at an angle in order to use space more efficiently and the cows climb a gentle grade from the floor into their stall so that when the

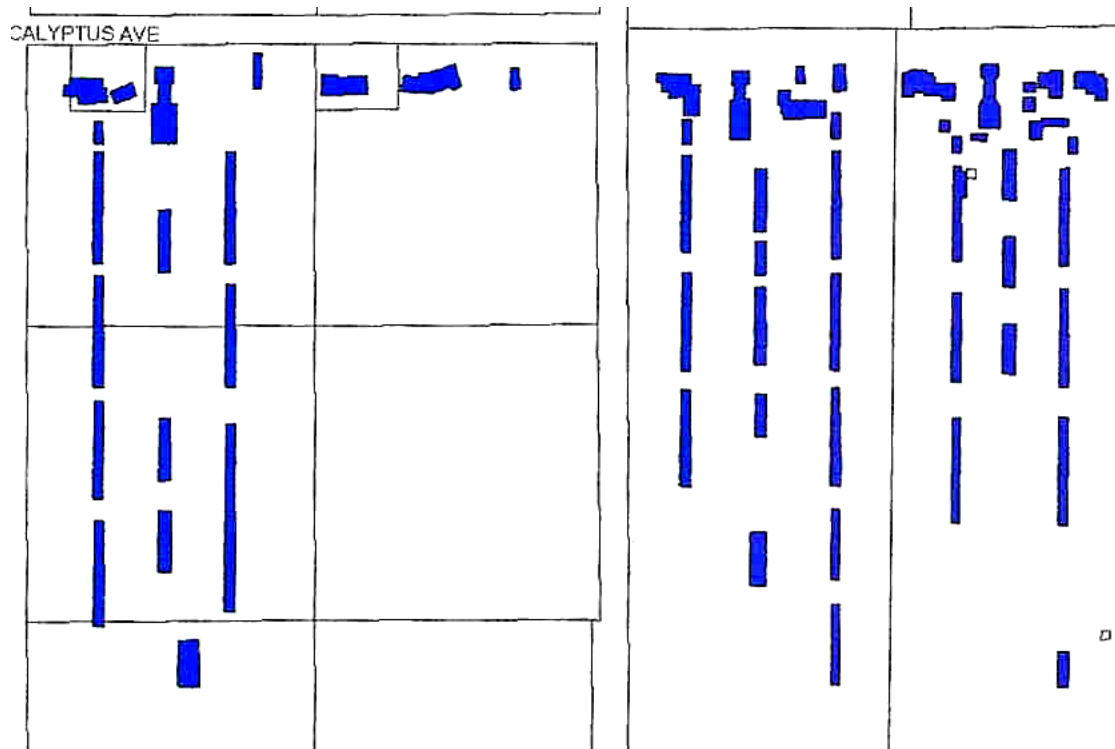
milkers come along, they do not have to kneel because the cows are at an elevated height. This is a labor and time saving device because it eliminates the amount of time it takes for milkers to kneel down to access the udders of the cows. Most of the farms from this period will exhibit the “herringbone” style of barn in the agricultural preserve area. In addition to the change in the parlor layout, the modernized milking parlors are also equipped with milking machines that automatically express milk from the cow’s teats and also stop automatically once the cow’s milk flow lessens. All of the “herringbone style” milk parlors that were constructed after 1950 were designed in the Ranch style to match the residences.

If there is more than one residence, then the residences are constructed on either side of the milking parlor. All the buildings that are related to a post 1950 dairy property are painted in the same color scheme, even if the individual resources are not necessarily constructed in the same architectural styles. These large dairy operations have a circular driveway in front of the milk parlor and almost always have designed landscaping to complement the property as a whole, both in front of the milking parlor and in front of the residences. The property is often times surrounded by a matching fence as well.



The property will also have many other dairy facilities associated with the operation such as pole structures, silos, bins, stalls, etc. These resources are laid out behind the milking parlor and residences and are aligned in a geometrically spaced fashion; either perpendicular or parallel to the milking parlor. The pole structures are long and narrow rectangular structures. The number of pole structures and associated farming equipment may reflect the size and productivity of the dairy operation. Behind the pole structures there is a large expanse of open space that is used for the production of feed and the processing of manure. Many of the dairy properties from the era have signs in front of their operations exhibiting the Dairy Association that they are connected with.





The physical relationship of resources within the boundaries of a property that was constructed after 1950 demonstrates how the “milk factories” operated and how the dairy farmers lived and operated their dairy farm during this period. Some of these dairies may still be operated by a single family, but likely will be operated by multiple family members or hired hands that live and work on the land. Regardless, they often include additional houses for sons or daughter’s families, brothers, uncles, or the like. But most of the dairy operations that are associated with this context were built by former dairy farmers that had relocated to the Chino Valley after having moved from the Artesia area. Because of the small fortune they had gained from selling their land in Los Angeles County, the dairy farmers constructed these large dairy operations all at once and included the most advanced and efficient dairy facilities available in the nation at the time. The multitude of the buildings and structures on the property combined with their geometric arrangement demonstrates the introduction of scientific feeding and breeding, resulting in larger herds and more productive dairy operations. Additionally, the size and style of the Ranch houses reflect the wealth that these dairy farmers had attained. Many of the larger Ranch style residences from this period appear to have been designed by architects or prominent builders, which further demonstrates the image and opulence of the post-1950 dairy farmers.

The change to the “herringbone style” milking parlors demonstrates the change in the increased productivity and the scientific advances that occurred in the milking industry. The presence of multiple residences on these properties represents the multi-



generational nature of the industry and the importance that the dairy lifestyle played in the unity of the family. The manicured landscaping and general condition and continuity of the properties demonstrate the pride that the dairy farmers had toward their profession and the pride they had in the hard work and diligence of building up their dairy operations. The milk trucks were replaced by large semi trucks, which continued to utilize the circular driveway in front of the milking parlor to express milk from the storage tanks. The signs displayed in front of the

dairy operations exhibit the large presence of the dairy associations and the pride and loyalty that the dairy farmers have in membership with certain dairy associations.

The majority of properties in the NMC study area are associated with this historical context. This era demonstrates the flood of dairy farmers coming to the NMC area to dairy once they were entirely forced out of the Artesia and Dairy Valley area. This second wave of inhabitants represents the group of dairy farmers who held out in Los Angeles County for a premium return for the sale of their land so that they could not only relocate to the Chino Valley area, but also could also increase their dairy operations and upgrade their facilities. The dairy farmers came to this region because there had already been an established network of dairy operations and support industries to make the move an economically and logically feasible one. Refer to Appendix A for a list of properties that may fall within this historic context.

### ***Character Defining features and Integrity Considerations:***

The **minimum characteristics** that are necessary to identify a post 1950 dairy property as associated with its identified historic context are: at least one large residence that dates to this period in the Ranch architectural style that exhibits little alteration, a large “herringbone style” milking parlor designed in the Ranch style, a circular driveway, numerous geometrically spaced rows of pole structures and other related dairy facilities, and a vast expanse of open space to the rear of the property. The property may have multiple large residences and a few smaller workers’ residences.

A post 1950 dairy property that exhibits **high integrity** is a property that exhibits the minimum characteristics of a property identified as having an association to this historic context. The property must have at least one large residence that dates to this period in the Ranch style and may have additional residences that were constructed prior to 1949, but the milking parlor must date to this period. (Some operations that have

buildings constructed during this period may have a milking parlor that dates prior to 1949, which might better reflect the previous historic context. However, the property might better reflect this historic context if the barn has been upgraded on the exterior and interior and all the other resources better fit into this context due to their age and architectural styles.) The individual elements will possess high integrity individually (retain their original materials, design, workmanship, feeling, association, and location) and the property will possess integrity as a whole (the elements will retain their original locations and physical relationships, the open space will remain intact). The buildings and structures will retain their original uses or may be abandoned but should clearly depict their original operational uses.

A post 1950 dairy property that exhibits **moderate integrity** is a property that exhibits the minimum characteristics of a property identified as having an association to this historic context. The property must have at least one residence that dates to this period and may have additional residences that were constructed prior to 1949, but the milking parlor must date to this period. The property as a whole will possess their original locations and physical relationships; however, the individual elements may have lost some of their historic integrity. For example, the minimum characteristics are present but the roofing material and windows have been replaced on the residence but it can still be identified as its designed architectural style. The milking parlor remains intact but is currently being used as storage, but no physical alterations have occurred on the milking parlor. The milking parlor may have a replaced door or covered windows, but the physical skeleton is intact. The property continues to convey its historic association with a post 1950 dairy property but has a few minor alterations.

A post 1950 dairy property that exhibits **low integrity** is a property that does not exhibit the minimum characteristics of a property identified as having an association to this historic context. One or more of the major characteristics is missing. The majority of buildings do not date to the period of significance 1950-1969. The property as a whole lacks integrity of location, design, setting, association, feeling, materials, and workmanship as well as the individual resources lack integrity. For example, the residence has had major alterations such as re-stuccoing or residing in a material that is not indicative of its architectural style, all of the original windows replaced with windows that are not compatible with the original architectural style, or a large addition off the side of the residence that greatly detracts from its original design intent, and the original roofing materials replaced with a new material that is not compatible with its original design intent. The milking parlor has had major alterations and is no longer being used for its original purpose. There is an addition of a manufactured home and a pre-fabricated 6-bay garage on the property. The property no longer conveys its historic association as a post 1950 dairy property.

## 5. Dairy Support Industries or Other Commercial Properties

There are a handful of properties that are commercial (non dairy farm) in nature that may have historic associations to the development of the area as a dairy center in

Southern California. The apparent closeness of the dairies within the study area had distinct economic advantages for the type of dairying they practiced. By locating near each other, the dairies were able to run more efficiently because the close proximity made bulk feed delivery and milk collection easier. It is no coincidence that the commercial properties that are located within the NMC study area are commercial endeavors that provide supporting industries to the dairy operations. Many of the commercial properties are located along Euclid Avenue, although a few are scattered throughout the study area. The percentage of non-dairy farm commercial operations is relatively low, comparatively.



The commercial properties vary in their physical layout depending on the type of operation that it comprises. Therefore it is not possible to describe all of the commercial property types as part of this reconnaissance survey. However, for a property to be significant under this historic context it needs to exhibit four things: 1) a direct and identifiable association with one of the three periods of dairy industry development within the region, 2) contain characteristics that are quintessential to that type of commercial enterprise, 3) have a demonstrated importance to the operation or development of the dairy industry as a whole, for which it is a supporting industry, and 4) retain enough integrity to identify that property as contributing to the identified historic context. More research is necessary under each commercial type to adequately evaluate commercial properties under this historic context.

## **6. Ranch Style Houses**

The majority (nearly 75%) of residences built within the project study area reflect the Ranch Style of architecture. The Ranch Style is seen in both the residential architecture as well as the later (1950-1990) milking parlors. However, this historic context is specific to the residential architecture. Within the study area there appear to be three distinct phases of the Ranch style characterized by differences in construction techniques and materials. The first groups of Ranch style buildings are representative of those constructed prior to 1959. The second phase includes those constructed between 1960 and 1980. Finally, the third group of Ranch style

residences were constructed after 1980 until present. Additional research is needed to determine the percentage of resources that fall into each subgroup.

Although all of the materials that are used within the project area are commonly used in the Ranch style of architecture, certain applications of design elements and combinations of materials suggest stylistic influences linked to either Dutch or Portuguese heritage.

The Ranch style of architecture originated in the mid-1930s in California. It gained in popularity during the 1940s and became the dominant style throughout the country during the decades of the 1950s and 1960s. Loosely inspired by the early Ranchos of the post-mission period in California that once dotted the landscape of the Rancho Santa Ana del Chino, the popularity of the “rambling” Ranch houses was a reflection of the country’s increasing dependence on the automobile. As with the dons of the mid-nineteenth century, the current dairy farmer’s livelihood is based on cattle.

The large number of Ranch style residences in the study area represents the fact that several dairy farmers were moving to the area during the period that this style was very popular. In addition to the general popularity of the Ranch style between 1950 and 1985, several local building magazines were featuring Ranch style homes and building plans in their magazines. Local builders and architects were likely familiar with this building style and the large lots provided for room to design and construct large, rambling plans. Unlike several tract housing developments that were booming up in the Ontario area during the 1950s and 1960s, the designer was not limited to a small lot to squeeze a Ranchette (mini Ranch style house) on.

Several of the Ranch style residences located within the project study area are very expansive and appear to be architect designed or constructed by prominent builders of the day. The architects were not identified or studied as part of this reconnaissance survey, but should be investigated in the next survey phase. Some of the Ranch style residences may have significance for being the work of a master or possessing high artistic value. These buildings need to be considered on an individual basis and need to be compared with all the other Ranch style residences located within the study area that were constructed within the same period of time. There are fine examples of each of the three phases of Ranch style residences located within the study area, as well as good examples of the residences with either Dutch or Portuguese influences.

There are a few expansive Ranch style residences from the late 1940s and 1950s, but most of the larger Ranch style houses appear to date to after the 1960s. This may be due to the fact that the larger 1960s residences were constructed by the dairy farmers who had sold their land in the Artesia area and were able to invest in larger homes. The larger homes from the late 1950s and 1960s also demonstrate the higher income level that the more productive dairy farmers earned with the mechanization and industrialization of their dairy operations. The increased production led to an increase in prosperity and the Ranch residences reflect the farmer’s ability to commission expansive custom designed Ranch homes on their newly attained land.



***Character Defining Features and Integrity Considerations:***

Ranch style houses are one-story buildings with a long, horizontal emphasis, seeming to hug the ground, with larger ranches giving the impression of rambling over their terrain. The house usually has a low-pitched roof and wide overhanging eaves and is often in a rectangular, “U” shaped, or “L” shaped plan with a cross gable or gable on hipped roof that breaks up the horizontal line. The houses have low-key fronts that provide privacy from the street and opens up in the back, which created a new way of living. The Ranch style house was an invitation to live intertwined with one’s family and with the outdoors.

The **minimum characteristics** that are necessary to identify Ranch style residence as associated with its identified historic context are: one story, large expansive, horizontally



emphasized rambling plans, low-pitched gabled, hipped, or intersecting gable roofs with expansive overhanging open or boxed eaves, wood shingle roofs, “U” shaped, “L” shaped or “S” shaped plans, attached garages, breeze ports and covered walkways, wide prominent chimneys, integral or recessed front porches, concrete slab foundations, large picture windows, plain post porch supports, wide entry doors or French style stylized paneled front entry door, sliding glass doors facing the rear of the residence, and an emphasis on outdoor

space via an orientation of windows toward a rear patio area. Some of the roof forms consist of a gable over a hipped roof or a “widow’s peak” design. Many of the early Ranch style residences have small square cupolas projecting from their roofs. The property must exhibit those character-defining features that are generally recognized with these styles, as described above. It may include landscaping features, but these are not essential. Additional features may vary depending on the relevant sub-group that the residence is associated with. For properties being evaluated within the context of one of the Ranch style subgroups, then the residence must exhibit the majority of the minimum characteristics for a Ranch style residence plus the following:



Some character defining features of a **pre-1959 Ranch style** residences include wood shingle roofs with wide overhanging eaves and wood-cased multi-light windows, square or diamond pattern lights on the windows, glazed and paneled doors, single width entry door the use of a combination of siding materials such as horizontal wood siding combined with board and batten siding and smooth stucco with some type of contrasting treatment along the

footing of the main façade, small square roof top cupolas projecting from the gable line, small projecting rectangular bays on the principal facades, multi-light picture window, or just one large picture window.



Some character defining features of a **1960s through 1980s Ranch** house are asbestos shingles, asphalt shingles, or a composition roofing material, aluminum cased sliding windows, large picture window with one single pane of glass, attached two-car garage, plain metal or wood post porch supports, and concrete slab front porches located under a long narrow shed roof attached to the principal roof or recessed within the central bay of the building, homogeneous exterior surface, the use of stone and masonry, arch patterns along

the walkways, large surrounds around the main entry and windows, stylized double doors with ornate panels, glazing and ornamental oversized hardware, horizontally arranged aluminum sliding windows all sheltered by an expansive low pitched gable or cross gable roof.



Some character defining features of the **Ranch houses constructed after 1980** include clay tile roofs larger floor plans, split levels, more contemporary and shed building styles, diagonal siding, wide board trim, window surrounds, and false half-timbering, Spanish Colonial Revival influences.

Some of the design features that appear to be of **Northern European (Dutch) influence** include windmills, scalloped barge board, extended eaves, square cupola with perches

and pyramid roof protruding from the roofline, diamond pattern windows, window boxes, carved balusters and faux balconies, carved or curved knee brackets supporting the roof, extended roof girders, louvered or paneled shutters, scalloped horizontal wood frieze board under the gables, spindle work or turned porch supports, and gambrel roofs. A few of the residences also have small statues or lawn ornaments exhibiting Dutch milkmaids or characterized Holstein cows.



Some of the design features that appear to be of **Mediterranean (Portuguese) influence** include heavy carved or cast stone work, decorative ironwork railings, window grilles, fences, or shutters, terra cotta tiles, rough stucco, flat, mansard or multi-gabled roofs, large arched openings, arched window and door surrounds, arched colonnades and breezeway between the house and garage, the use of dark, natural material, brick, flagstone or other stonework.



A Ranch style residence that exhibits **high integrity** is a property that exhibits the minimum characteristics of a property identified as having an association with its historic context and subgroup. The property must have at least 90% of its original exterior features and must have the essential features that were part of the original design intent. The property will be easily identifiable as a property that exhibits this historical context. The property retains its original use or is abandoned but its original use is



evident due to its lack of alterations. The property retains its historic location and setting, materials, design, workmanship, feeling and association.

A Ranch style residence that exhibits **moderate integrity** is a property that exhibits the minimum characteristics of a property identified as having an association to this historic context and subgroup. The property must have at least 50% of its original exterior features. The property may have a few minor alterations such as a changed entry door, the addition of a metal security door, a few replacement windows, new roofing material or the addition of a small room or shed type room off to one side or the rear, but not all of these elements combined. The property will be easily identifiable as a property that exhibits this historical context. The property continues to convey its historic association but has a few minor alterations. The property retains its historic location and design, feeling and association, and the majority of its workmanship and materials.

A Ranch style residence that exhibits **low integrity** is a property that does not exhibit the minimum characteristics of a property identified as having an association to this historic context or its subgroup. The property does not retain at least 50% of its original exterior features. For example the major features of the residence have been altered or replaced such as the siding, layout, significant character-defining features, windows, roofing material, and primary elevation. The property is identifiable as a property that exhibits this historical context, but the property's integrity is so low that it does not look as though it would have during the period that it was constructed. The property does not retain its original location and setting, design, workmanship, materials, feeling or association. The property is no longer being used as its original purpose, or does not display its original purpose.

## V. Identification of Potential Historic Districts

A district is groups of buildings that physically and spatially comprise a specific environment: groups of related buildings that represent the standards and tastes of a community or neighborhood during one period of history, unrelated structures that represent a progression of various styles and functions, or cohesive townscapes or streetscapes that possess an identity of place. A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. The districts may be unified by geographic location, building type/style, shared historic context, or ethnographic history.

As part of this reconnaissance survey, Galvin & Associates project team identified two distinct potential districts within the NMC project study area. They are as follows:

### ***Unified by geographic location***

The entire NMC study area is a geographically definable area that is clearly distinguished from surrounding properties. There is dense residential development to

the north of Riverside Drive, the northern boundary of the NMC study area, to the west of Euclid Avenue and the east of Milliken Drive. The boundaries are defined by the change in density and property types and differences in their patterns of historic development. The southern edge of the NMC study area is defined by the county boundary and Merrill Avenue. However, this boundary edge is less defined by changes in density, scale, type, and styles of buildings as the parcels to the south of this line are similar in use, style, density, etc. as the properties located in the NMC study area and share the same historic context. Therefore the NMC study area may be part of a district that extends beyond its current southern boundary.

The NMC study area has been preserved as an agricultural reserve area by the Williamson Act Contracts that began in the 1960s. Until recently, this area has remained a dairy area that has transformed from the early part of the twentieth century. The NMC study area represents a cultural landscape defined by the transformation of the dairy industry from open range dairying to dry-lot mechanization techniques to the industrialization of dairy farming. Dairy properties that represent all three periods of development are present within the entire NMC study area. In addition to the dairies, there are a few subsidiary businesses that serve as a support network for the dairy industry.

The significance of the NMC study area is derived from its association with the development of the mechanization of the dairy industry in Southern California and is evidenced by the concentration of intact dairy operations that represent small farming operations to the most scientifically up to date facilities within a very geographically defined area. Dairy landscapes of this nature no longer exist within densely urban environments within California, and this area may be the last of its kind. The concentration of dairies within the NMC area represent the hard working lifestyle of the dairy farmers who had worked their way from being hired milkers to owning their own enterprises.

The applicable areas of significance to California history that have been identified within the project study area include agriculture, the dairy industry, community development, ethnic heritage, settlement of the region, economics and social history. The levels of historical significance include the local (regional and county) and State levels.

The period of significance for the New Model Colony/ Chino Valley Dairy District is 1915 to 1975. This district is significant at the local, regional, and state levels.

Potential contributors to this district are those dairy farms located within the project study area that exhibit the essential minimum characteristics of at least one of the three periods of development of the dairy industry in the NMC area and retain a modest or high level of integrity as a property type representing that context as described above.

Potential non-contributors to this district are those dairy farms located within the project study that do not exhibit the minimum characteristics of the property type associated with at least one of the three development periods and/or possess a low level of



integrity. Additional non-contributors are properties that do not share the dairy farming association or context, such as the nursery properties or large light industrial warehouses along Milliken Avenue.

### ***Unified by building type/ style***

There is a discontinuous district made up of the 1920-1940 Art Deco or Streamline Moderne milking parlors. As mentioned previously throughout this report, there is a small grouping of “flat style” milking parlors that were constructed between 1920 and 1940 in the Art Deco or Streamline Moderne Style. These milking parlors are a unique building type and may exhibit the largest concentration of their type in Southern California. Because the milking parlors were constructed for the very explicit purpose of milking cows, their design represents those functions.

Their significance is derived from both their building type and their uniform architectural styles. These dairy parlors represent a distinguishable type, period, and method of construction that is not only unique to the dairy industry, but is also unique to this area. This property type represents two important changes in the dairy industry; the earliest development of the mechanization of the milking process (the dry-lot method), and how the changing ideas in sanitation standards were imposed by local and state officials for the battle against the spread of disease influenced the choice of construction materials and architectural styles that were used for the milking parlors.

**The period of significance** for the 1920-1940 Art Deco or Streamline Modern milking parlor discontinuous historic district is 1920-1940. The level of significance for this property type is the regional and state levels.

Potential contributors to this discontinuous district include any “flat style” milking parlor located within the project study area that was constructed between 1920 and 1940 in the Art Deco or Streamline Modern architectural style and exhibits a high or moderate level of integrity as defined in the previous section.

Potential non-contributors to this discontinuous district would include any “flat style” milking parlor that is located within the project study area that was constructed between 1920 and 1940 in the Art Deco or Streamline Modern architectural style that exhibits a low level of integrity as defined in the previous section.

### ***Unified by shared historic context***

Although there are four historic contexts that represent a grouping of properties that are located within the project study area (pre-1930 dairy properties, 1931-1949 dairy properties, 1950-1969 dairy properties, and commercial properties), the individual properties that comprise these groupings are scattered about the project study area and are not geographically definable due to the number of imposing resources that would be considered non-contributing to that historic context.

## ***Unified by shared ethnographic history***

There are several ethnic groups that occupy the NMC study area. The two largest groups are made up of Portuguese dairy farmers and Dutch dairy farmers. Some of the Ranch style homes appear to demonstrate influences in application of design that may be derived from their homelands. However, Galvin & Associates project team conducted a reconnaissance map study of the ethnic groups that are located within the project area to determine whether there were concentrations of each ethnicity within the project area.

The map study consisted of identifying the current parcel owner's name and identifying that name as either: 1) Portuguese, 2) Dutch, 3) Hispanic, 4) Asian, 5) French Basque, or 6) other. Each ethnic group was assigned a color and plotted onto a parcel map to visually see if any concentrations exist. The results were inconclusive, although there seems to be more Portuguese located in the southwestern quadrant than the rest of the study area, and the Dutch seem to be pretty well scattered evenly throughout the study area. The eastern half of the study area currently has more Dutch farms than other ethnicities, but not all parcels were identified.

The methodology to this approach is flawed in giving a true representation of the ethnic diversification within the area for several reasons, 1) it assumes that the last name is an accurate indicator of ethnicity when it is possible that families may have intermarried, 2) not all of the names and parcels were identified and so the map does not provide a clear picture of the color plotting, and 3) it does not give a clear representation of the historic concentrations within the area. However, regardless of the inconclusive existence of smaller ethnic concentrations within the study area, the project area alone does include at minimum two distinct ethnic groups that are geographically concentrated within the area, although not necessarily immediately next-door from one another. These two ethnic groups (the Portuguese and Dutch) each have a history of dairy farming that they brought from their homelands to Southern California. With their migration they brought the idea of dry-lot dairying to the region, which transformed the way dairy farming was operated. Today, this dairy area is one of the last concentrations of dairies in Southern California. Until these two groups move to the next area that will allow their industry to operate.

## **VI. Conclusions**

This historic context is the first step in identifying potential historic resources within the NMC project study area so that the City can consider alternatives for their preservation and incorporation into the planning process to facilitate the transition of this primarily agricultural area into a new urban development. The research themes that guided the background documentary research included the history of San Bernardino County, the history of Chino and Ontario, the development of the dairy industry in California, the development of the dairy industry in Southern California, the development of dairying in the Chino Valley, the Portuguese, the Dutch, and the French Basque in California, the

development of dairy parlors, and the architectural styles in southern California. The research themes guided the historical research for the study area and served as an outline for developing relevant historic contexts within which to evaluate the properties present.

After the preliminary historic research was completed, six historic contexts were developed for identifying and evaluating resources within the study area. These are 1) Pre-1930 rural or dairy properties, 2) 1930-1960 Dairy Properties, 3) Post-1960 Dairy Properties, 4) Commercial Properties or other, 5) Art Deco or Moderne Milk Parlors (circa 1920-1940), and 6) Ranch style houses. Additional contexts may be developed at a later time.

There were several different resource types that were identified within the study area. These resources were broken down into four categories 1) residences, 2) milk parlors (barns), 3) commercial buildings and 4) ancillary building or structures. Each of the properties located within the NMC study area exhibits one or more of the aforementioned resource types and fits within one or more of the historic contexts.

The residences were designed in a very limited number of architectural styles; the most prevalent is the Ranch style. The majority of residences constructed between 1940 and present represent the Ranch style. There are a few pre-1940 residences that were built in the minimal traditional style or the Craftsman style. A small number of residences reflect Victorian influences seen in folk vernacular farmhouses.

There are clear differences between the early (1930-1959) Ranch style residences and the mid-century (1960-1980) and modern (1980-present) Ranch style residences. The most distinct difference between the early and more modern Ranch style houses is the use of wood windows versus aluminum sliding windows. Additionally, there are a few design elements that are indicative of either Portuguese or Dutch influences. Some of the design characteristics that were evident on houses designed by the Portuguese include the use of masonry, clay tile, and rough stucco, the use of arches and decorative ironwork. The design characteristics that appear to be influenced by the Dutch include windmills, decorative bargeboards, multi-light diamond pattern windows, window boxes, carved brackets supporting the roof, turned or spindle work porch supports, and scalloped eaves.

## **VII. Recommendations**

The intent of this historic context and reconnaissance survey was to provide the first step in identifying historic properties by providing a framework for identification and evaluation. It is intended to be augmented as the survey process continues. The background historical research that was conducted was cursory in that the intent of the research was to provide just enough information to understand the resources present and to provide a time frame and identify potential relevant historic contexts. The purpose of the historical overview was not to provide a comprehensive history of the

development of the area. Recommendations for future research and survey efforts include the following:

1. Continue the survey of the NMC study area at the intensive level. Focus on the properties that are more than forty-five years old that are associated with an identified historic context and possess moderate or high levels of integrity.
2. Compare all of the properties within each identified historic context. Identify one or two examples from each that are the best representations of their historic context. Work to preserve at least one of the best examples from each of the property types.
3. Identify properties that represent unique property types or transitions between historic contexts such as properties that clearly represent a three dairy era or properties that have obvious additions of residences from each subsequent generation, as evidenced by the 20-gap in architectural styles. Focus on the earliest properties identified within the study area and identify the original occupants. Those individuals may have been important individuals to the settlement of the area.
4. Develop a report with a significance statement justifying what properties are considered important to the local community and establish local significance criteria that are specific to the dairy properties. Use these criteria for the next evaluation stage.
5. Compare the identified ethnic names to the design characteristics of the Ranch style residences while in the field to verify the validity of ethnic influences on certain design application.
6. Compare this dairy area to other areas from the same historic periods throughout Southern California and California.
7. Visit other research repositories such as U.C. Riverside and Cal State Pomona to locate more information or written studies on the other ethnic groups located within the region.
8. Map out the location of the groups of properties that are associated with each of the historic contexts to determine whether there are geographic concentrations of each property type by associated historic context.
9. Identify important individuals within the community that live or have lived within the NMC study area and determine if there are extant resources associated with those individuals.
10. Find out more information on the role of the Dairy Associations within the NMC study area. Are the Associations ethnically homogeneous or diversified?
11. Conduct a comparative study of other dairy areas within California such as the San Joaquin Valley, Arcata Bottoms in Humboldt County, and the Fresno Regions. What other dairy areas are the NMC dairies associated with? How are they related? Contact the cities of Artesia, and other adjacent communities and request copies of any reports, studies, or oral interviews that are relevant to the development of the dairy industry in Southern California.
12. Compile a comprehensive bibliography of research sources on relevant historic contexts.

13. Research the roots of Portuguese and Dutch architecture to verify the assumptions regarding the ethnic influences on the Ranch style residences.

**Long-term preservation planning and interpretation recommendations include:**

14. Consider purchasing one operating dairy facility or coordinating with a dairy farmer to continue to operate the facility as a hands-on research facility, living history museum, or educational facility that would be open to the public for a nominal fee.
15. Consider photographically and architecturally recording one of each of the milking parlor types and styles for submission to the National Park Service's Historic American Building Survey (HABS) collection to be sent to the Library of Congress. Provide local museums, libraries, or research repositories with additional copies of the recordation effort.
16. Hold a community meeting and invite the residences of the NMC area to listen to the results of the reconnaissance survey and to solicit answers to research questions that are yet unanswered to date. Compile a survey questionnaire and distribute to the attendees or send to residents by mail. Follow up with telephone calls or send thank you notes for their contributions.
17. Video tape a tour of a dairy operation for file at the local library and research repositories.
18. Consider naming streets or residential developments after important individuals within the area or after dairy terminology.
19. Consider developing design guidelines that might be compatible with the present architectural styles.
20. Explore alternative uses for some of the intact milking parlors, in particular the 1920-1940 Art Deco and Streamline Moderne milking parlors.
21. Develop a typology and architectural guidebook or driving tour of important buildings within the study area. The guidebook could be used for local planning, the development of design guidelines for infill and future development, or as a coffee table book.
22. Consider publishing a coffee table book on the dairy properties before they are demolished.
23. Compile an "A" list of dairy properties, buildings, and structures for preservation. Impose a fee for demolition of these buildings.



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## Appendix A- Table of Historic Contexts by Address

Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
6178	Archibald	X						X	
14709	Archibald	X	X					X	
14692	Archibald	X	X						
14739	Archibald		X			X			
14355	Archibald		X						
13750	Archibald		X				X		
13878	Archibald		X						
13990	Archibald		X						
1401	Archibald		X				X		
14058	Archibald		X				X		
14744	Archibald		X				X		
15066	Archibald		X	X					
13898	Archibald			X			X		
15090	Archibald			X			X		
15092	Archibald						X		
13838	Archibald			X					
13742	Archibald			X					
13150	Archibald				X				
13344	Archibald				X				
13610	Archibald				X				
13104	Baker	X							
13129	Baker		X						
12953	Baker			X			X		
13051	Baker			X			X		
13130	Baker			X			X		
13182	Baker			X					
13158	Baker			X					
13172	Baker			X					
13180	Baker			X					
14333	Bon View	X						X	
14316	Bon View	X						X	
14213	Bon View	X		X					
13905	Bon View	X	X						
13585	Bon View	X				X			

Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
13311	Bon View	X						X	
13160	Bon View	X						X	
13058	Bon View	X						X	
13506	Bon View			X		X			
13566	Bon View					X		X	
13485	Bon View		X				X		
13705	Bon View		X						
14330	Bon View		X		X		X		
13159	Bon View		X		X				
13450	Bon View		X				X		
13446	Bon View								
14451	Bon View						X		
13752	Bon View			X			X		
13839	Bon View			X					
13006	Bon View			X					
13020	Bon View			X					
14283	Bon View			X					
14306	Bon View			X					
14456	Bon View			X					
13202	Bon View				X				
13041	Campus	X	X			X			
13017	Campus	X				X			
13187	Campus	X							
13144	Campus		X			X		X	
13067	Campus							X	
13142	Campus						X		
13107	Campus				X				
9139	Carpenter		X				X		
9213	Carpenter		X						
14761	Carpenter			X			X		
14741	Carpenter			X			X		
9541	Chino	X							X
8931	Chino	X				X			
8406	Chino	X							
8089	Chino	X						X	
8074	Chino	X						X	
7941	Chino	X						X	

Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
7716	Chino	X			X				
8861	Chino		X			X			
8271	Chino					X	X		
8171	Chino		X			X			
8146	Chino			X		X	X		
8007	Chino		X			X	X		
7823	Chino		X			X	X		
9541	Chino							X	
9521	Chino		X				X		X
9200	Chino		X						
8350	Chino		X				X		
8254	Chino		X				X		
8113	Chino		X				X		
7593	Chino		X		X				
7475	Chino		X						
7439	Chino		X				X		
7277	Chino		X						
7239	Chino		X	X					
7110	Chino		X						
9692	Chino						X		
9655	Chino						X		
9581	Chino			X			X		X
9561	Chino			X			X		X
9510	Chino						X		
9450	Chino				X		X		
9145	Chino			X			X		
9141	Chino			X			X		
8929	Chino			X			X		
8919	Chino			X			X		
8278	Chino			X			X		
7918	Chino						X		
7868	Chino						X		
7824	Chino			X			X		
7812	Chino			X			X		
7208	Chino						X		
7192	Chino						X		
7166	Chino						X		

Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
7687	Chino						X		
7894	Chino				X				
14320	Cleveland			X					
14350	Cleveland			X					
14482	Cleveland			X					
8381	Edison	X	X	X					
7691	Edison	X						X	
7444	Edison	X						X	
7260	Edison	X							
8354	Edison					X			
8185	Edison		X			X	X		
7990	Edison		X			X			
7260	Edison					X			
7226	Edison							X	
10201	Edison		X						
10469	Edison		X	X					
10785	Edison		X	X					
9343	Edison		X						
8535	Edison		X	X			X		
8485	Edison		X						
8314	Edison		X						
8292	Edison		X						
8270	Edison		X						
7587	Edison		X	X			X		
7469	Edison		X				X		
7397	Edison						X		
7371	Edison		X				X		
7325	Edison		X						
9490	Edison						X		
9074	Edison			X			X		
9060	Edison			X			X		
8332	Edison						X		
8311	Edison						X		
8061	Edison			X			X		
7914	Edison						X		
7891	Edison						X		
7352	Edison						X		



Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
7330	Edison			X			X		
7225	Edison			X			X		
7244	Edison						X		
7218	Edison						X		
9811	Edison			X					
9928	Edison			X					
10129	Edison			X					
19157	Edison			X					
10185	Edison			X					
10241	Edison			X					
10311	Edison			X					
10823	Edison			X					
8559	Edison			X					
8513	Edison			X					
10511	Edison			X					
10573	Edison			X					
7415	Edison				X				
7145	Edison								
10076	Edison				X				
9725	Eucalyptus	X	X						
7287	Eucalyptus		X			X			
9711	Eucalyptus		X						
10115	Eucalyptus		X						
9031	Eucalyptus		X				X		
9069	Eucalyptus		X				X		
7388	Eucalyptus		X						
8551	Eucalyptus		X						
7634	Eucalyptus		X				X		
7511	Eucalyptus		X				X		
9859	Eucalyptus			X			X		
10350	Eucalyptus			X			X		
9213	Eucalyptus			X			X		
9279	Eucalyptus			X			X		
9099	Eucalyptus			X			X		
10051	Eucalyptus			X					
10084	Eucalyptus			X					
10753	Eucalyptus			X					

Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
10529	Eucalyptus			X					
10869	Eucalyptus			X					
11111	Eucalyptus			X					
11101	Eucalyptus			X					
8911	Eucalyptus			X					
8888	Eucalyptus			X					
8831	Eucalyptus			X					
8731	Eucalyptus			X					
8643	Eucalyptus			X					
8521	Eucalyptus			X					
8477	Eucalyptus			X					
7455	Eucalyptus			X					
7755	Eucalyptus			X					
7565	Eucalyptus			X					
7475	Eucalyptus			X					
7417	Eucalyptus			X					
7280	Eucalyptus			X					
7277	Eucalyptus			X					
7233	Eucalyptus			X					
7698	Eucalyptus				X				
10333	Euclid		X						
14123	Euclid		X						
14455	Euclid	X			X	X			
14437	Euclid	X							
14375	Euclid	X						X	
14095	Euclid	X			X				
14057	Euclid	X			X			X	
13835	Euclid	X				X		X	
13831	Euclid	X	X			X			
14281	Euclid		X			X	X		
13813	Euclid					X			
13647	Euclid		X			X			
13583	Euclid					X			
13135	Euclid		X						
13159	Euclid		X						
14157	Euclid		X						
13853	Euclid		X						

Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
14411	Euclid				X				
14393	Euclid				X				
14397	Euclid				X				
14351	Euclid				X				
14211	Euclid				X				
14185	Euclid				X				
14107	Euclid				X				
13545	Euclid				X				
13529	Euclid				X				
13525	Euclid				X				
13519	Grove	X		X			X	X	
13605	Grove	X						X	
13524	Grove			X		X	X		
13429	Grove					X	X		
13403	Grove			X		X			
13377	Grove		X				X		
13715	Grove		X						
14848	Grove		X						
14746	Grove		X				X		
14050	Grove		X						
14016	Grove		X						
13960	Grove		X		X		X		
13849	Grove		X				X		
13817	Grove		X				X		
13814	Grove		X		X				
13608	Grove		X				X		
14361	Grove			X			X		
14400	Grove			X			X		
14651	Grove			X			X		
14117	Grove			X			X		
13675	Grove			X			X		
1441	Grove			X					
1447	Grove			X					
14049	Grove			X					
14545	Grove				X				
13908	Grove				X				
9119	Katie Lane			X			X		

Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
7954	Merrill	X							
9572	Merrill	X							
8966	Merrill		X		X				
9032	Merrill		X		X		X		
8620	Merrill			X					
8616	Merrill			X					
8610	Merrill			X					
13175	Ontario	X						X	
13134	Ontario	X						X	
13123	Ontario						X		
9456	Ontario			X					
13165	Ontario				X				
13213	Ontario				X				
13434	Ontario				X				
7297	Riverside	X				X		X	
7047	Riverside	X							
7423	Riverside	X						X	
7435	Riverside	X						X	
7659	Riverside	X						X	
7325	Riverside				X	X			
7877	Riverside		X		X	X			
8625	Riverside		X			X	X		X
8657	Riverside		X			X	X		X
7407	Riverside							X	
7387	Riverside		X						
7603	Riverside		X		X				
7987	Riverside		X				X		
8715	Riverside		X				X		
8815	Riverside		X				X		
8821	Riverside		X				X		
8825	Riverside		X				X		
9675	Riverside		X						
7247	Riverside				X		X		
9155	Riverside			X					
9381	Riverside			X					
9309	Riverside			X					
8775	Riverside				X				

Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
7416	Schaffer	X						X	
7435	Schaffer	X						X	
7537	Schaffer	X	X					X	
7993	Schaffer	X		X		X	X		
8455	Schaffer	X							
8559	Schaffer	X	X			X	X		
8255	Schaffer					X			
8484	Schaffer		X			X			
7365	Schaffer		X				X	X	
7520	Schaffer		X				X		
7611	Schaffer		X				X		
7849	Schaffer		X				X		
8261	Schaffer		X				X		
8321	Schaffer		X				X		
8325	Schaffer		X				X		
8877	Schaffer		X	X			X		
9029	Schaffer		X	X			X		
8087	Schaffer		X				X		
7255	Schaffer		X						
7777	Schaffer			X			X		
7856	Schaffer				X		X		
7938	Schaffer			X			X		
8025	Schaffer			X			X		
8010	Schaffer			X			X		
8551	Schaffer						X		
8557	Schaffer						X		
8817	Schaffer			X			X		
8847	Schaffer			X			X		
8920	Schaffer			X			X		
7316	Schaffer			X			X		
7436	Schaffer			X			X		
7477	Schaffer			X			X		
8605	Schaffer				X				
1453	Sumner		X						
14561	Sumner			X					
14717	Sumner			X					
14848	Sumner			X					



Street Number	Street Name	Pre-1930s Dairy Farms	1930- 1960 Dairy Farms	Post 1960 Dairy Farms	Commercial Properties	Art Deco Milking Parlors	Ranch Houses	Craftsman Residences	Multi-Generational Properties
13948	Walker		X			X			
13331	Walker		X						
13510	Walker		X						
14323	Walker		X						
14333	Walker		X				X		
13315	Walker			X			X		
13575	Walker			X			X		
13955	Walker			X			X		
13965	Walker			X			X		
14350	Walker			X			X		
13151	Walker			X					
13611	Walker			X					
13975	Walker			X					
13345	Walker			X					
13456	Walker			X					
13650	Walker				X				
13567	Whispering Lake Lane		X				X		
SE corner Edison & Bon View		X						X	

## Appendix B- Survey and Historic Context Methodology

The Galvin and Associates project team consisted of three team members, each who meet the Secretary of Interior's Professional Qualifications for History and Architectural History and have a minimum each of six years practicing in the field of architectural history and historic preservation. The team included Andrea Galvin, principal architectural historian/ preservation planner, and two sub-consultants, Kelly Ewing-Toledo, historian/ architectural historian, and Claudia Harbert, architectural historian. The survey and development of the draft historic context were conducted from December 2003 to August 2004.

The draft historic context and the historical survey were developed in accordance with the Secretary of Interior's Standards and Guidelines for Historic Preservation and National Register Bulletin 24, Guidelines for Local Survey: A Basis for Preservation Planning. The Project was conducted in three phases to include 1) pre-field archival research, 2) field survey and development of draft historic context, and 3) post survey data entry and preparation of reports.

### ***Pre-Field Archival Research***

The first phase of work included gathering the necessary data for developing a historic context and building a foundation for conducting the historic resources survey. The information that was gained from the pre-field research was used to develop a context in which to identify properties and served as a basis for evaluating the properties in the future. The purpose of the preliminary archival research was to identify potentially significant individuals, historical events, major industries (such as dairy farming), related industries (such as support industries) and development patterns. This initial research was used to build the foundation for developing a more detailed historic context that can be used for evaluating the individual properties in the future. The steps of the preliminary historical research included the following:

1. *Review of the project area using current and historic topographic maps, rancho plat maps, township maps, and aerial photographs.* This familiarized the project team with the project area and helped to identify major topographic features such as waterways, infrastructure elements, utilities and railroad lines, land use patterns, concentrations of buildings that are related by function, location, or use, and will assist in identifying historical and current development patterns. Topographic maps from approximately 50 years helped to approximate the number of properties that could be encountered during the field survey. Early maps identified early development areas, and current maps provided information on the current number of properties and identified pockets of historical development that had been demolished and replaced with new development.

2. *An initial site visit and orientation.* The project team drove around the project area with the City to get a feel of the area and to identify potential research themes. The initial site visit was used to orient the project team to major streets and landmarks, to compare existing data with information gained from the map review, to identify potential concentrations of buildings by type, location, function, use, or design and to locate important cultural spots, research repositories, and facilities to be used during field survey. The project team took notes of distinct areas, neighborhoods, potential districts, and property types/styles to guide more focused research that was used in developing the draft historic context.
3. *Assembling written historical data and reviewing previously published contextual histories on the development of the project area and adjacent communities (Secondary research).* Archival research was oriented toward the identification and description of general trends, groups, and events in the community's history and their known or likely effects on the community's development. The focus of the archival research was specific to the NMC project area, but also used general contextual histories from adjacent communities. This information was used as a foundation for developing the historic contexts for the project study area. The project team identified the contextual themes for developing a timeline for development, major events, and significant influences on the settlement pattern of the area. The archival research was conducted at local history museums, local historical societies, and city and county libraries.
4. *Preliminary identification of properties that are more than 50 years old.* The project team used information from the County Assessor's Office and historic topographic maps to identify which property may be more than 50 years old to be included in the historic inventory. The project team conducted a records search of all properties located within the NMC at the County Assessor's Office and printed out the property information. The Assessor's information provided information on the property's address and related parcel numbers, date constructed/approximate age (if available), historic and present use, and the owner's name and address. The project team then used the assessor's information for establishing an approximate number of buildings dating more than 50 years old and for inserting the pertinent information into the inventory CALCRD database. Some dates of construction were not accurate and required changing during the actual survey. Some dates were estimated in the field.
5. *Inserting preliminary information into the CALCRD database.* To ensure the most cost and time effective approach to conducting the reconnaissance survey, as much information as could be done prior to the actual survey was inserted into the electronic database before going into the field to conduct the historic survey. The consultant team worked with the City to prepare a list and spreadsheet of all the parcel numbers and addresses located within the study area. The City inserted all of the Assessor's information and property addresses, owner's names, etc. into the database for use in the field.

6. *Orientation and familiarization with the electronic database and CALCRD.* To more effectively develop and manage historic resources and survey data, the City of Ontario recently developed an Access-based database system, the CALCRD, to manage its local historic resources. Although intended to streamline the data entry and survey of historic properties, the database has not been field tested to date. Galvin & Associates project team field tested the survey and worked with the City to make changes early during the survey efforts to better facilitate the use of the database.
7. *Identifying preliminary historic districts.* The principal architectural historian, in conjunction with the other project team members identified potential historic districts early during the survey effort. The districts consisted of groupings of buildings, structures, objects, landscapes, etc. that have a shared historic context, are grouped geographically, or are similar in architectural style, type, or use. The preliminary identification of potential historic districts guided the archival research to develop a description, property boundaries, potential contributors and non-contributors and a statement of historical significance for the identified district and/or districts to be used in the Draft Historic Context for the NMC.
8. *Developing methodology for field survey.* Most of the project study area is homogeneous in dates of construction and property types/styles. The purpose of developing a survey method before conducting the survey was to identify concentrations of buildings that are similar in form and construction and to conduct the field survey in a manner that organizes the identification effort by buildings that have a possible shared historic context. Additionally, a focused survey method helped to minimize the time it took to conduct the survey by concentrating the survey by geographic region, shared historic contexts, and by the City's needs. The City has asked the project team to focus the initial inventory to the properties located in the eastern section of the NMC due to impending development and specific plans that are presently proposed.

### ***Field Survey and development of draft historic context***

The second phase of the project included conducting the field survey and inventory and the development of a draft historic context. Using the information prepared in the first phase of the project, the project team looked at the properties and historical data collectively and at a more detailed level. During the course of this phase, the historic context was augmented by new contexts that were identified in the course of the field survey and during additional research. Similarly, the field survey methodology was amended based on new information gained from newly identified historic contexts. The second phase consisted of the following:

9. *Developing an in-field reference guide and checklist.* The primary architectural historian provided the survey team with a brief description of expected property types and styles (as defined by the Research Design) with identified character

defining features and a written description and reference guide of terminology related to dairy farming, the use and function of typical associated property types, and other pertinent data to assist with the preparation of building descriptions and identification of character defining features of the individual buildings. This information and written reference guide was used in the field for quick reference to expedite in-field data entry, to serve as a check-list for uniform building descriptions, and to assist in identifying typical character defining features of building types and styles. The reference guide for building types and styles was developed from the information gained during preliminary research and the initial field review.

10. *Taking into account necessary precautions.* The project team conducted the field survey from the public right of way and consisted of at least two team members at any one time. The survey team did not trespass onto private property without invitation from the property owner and utilized all necessary safety precautions in compliance with all local, state and federal laws, rules and regulations, including all Cal/OSHA requirements.
11. *Conducting Field Survey.* The project team used assessor's maps and aerial photographs in the field to ensure the proper identification of buildings in relation to property address and location. These maps and photos also aided the survey team in identifying buildings or structures/objects that were not visible from the public right of way for use when writing the property descriptions. The project team used a laptop computer in the field that had the CALCRD downloaded onto the hard drive with the pre-inserted fields (APN and property address, year built and owner's name and address) for each property. The project team then inserted information onto the laptop computer while in the field. Information inserted during the field survey included the property descriptions (including major elements, design, materials, condition, alterations, size, setting, and boundaries), the resource attributes and codes, the resources present, a description of photo (date taken, accession #, view) the name of recorder and date recorded, and changes to date of construction if necessary (only if the in-field approximation of date appears significantly different from the date ascertained from the Assessor's information). A template was used for writing the building descriptions to ensure that the same information on each building was recorded in a uniform manner and followed the same order for future reference and ease of locating data.
12. *Photographing properties.* The survey team used a digital camera to take, at a minimum, one photograph of the façade (principal elevation) of each building, structure, object or feature related to an identified property that was visible from the public right of way. Second elevations and additional photographs were taken of some buildings to document major alterations to the building or particularly distinctive features. Related features (outbuildings, garages, barns, sheds, tank houses, carriage houses, masonry walls etc.) were also photographed as an inventory of location and condition of existing related features. The project team



kept a detailed photographic log that included the photo accession number, property address and APN, a brief description of photo for identification purposes, date photo was taken, and view (looking toward cardinal direction). The photos could not be inserted into the CALCRD in the field, so the photo log was used for inserting the electronic photographs into the database during the third phase of the project, post survey data entry and preparation of reports. The photographs were also used for reference in the event that the field researchers inadvertently missed inserting information into the CALCRD or had a question on a property after the field survey has been completed. The photographs were saved as jpeg files and condensed after being shot in the field to limit the file size of each photograph.

13. *Reviewing and Incorporating Oral Histories into Draft Historic Context.* As part of a 2002 CLG Grant, the City of Ontario conducted oral interviews of long time dairy farmers. The principal architectural historian reviewed the oral histories that were conducted by the City after the applicable research themes and historic contexts were established. This information was used to supplement the written historical data as applicable.
14. *Refining the delineation of potential historic districts and draft statement of historical significance.* The principal architectural historian, in conjunction with the project team, developed a significance statement for identified potential historic districts. The districts are groupings of buildings, structures, objects, landscapes, etc. that have a shared historic context, are grouped geographically, or are similar in architectural style, type, or use. The statement of significance for the potential historic districts included a general description of the natural and manmade elements of the district, the numbers of buildings, structures, and objects that do and do not contribute to the district, a general description of types, styles, or periods of architecture represented in the district, general physical relationships of buildings to each other and to the environment, general description of the district during the period(s) when it achieved significance, present and original uses of buildings, general condition of buildings, noncontributing elements, qualities that make the district distinct from its surroundings, and a concise boundary description. The content compiled for this segment of the project was incorporated into this Draft Historic Context.
15. *Developing and Refining Draft Historic Context.* This phase of the project included completing a review of the available literature found in the pre-field archival research. After the principal architectural historian completed the general background research to establish the historic contexts of the area and developed an outline for the Draft Historic Context, additional research was necessary to focus on specific people, properties, or contexts. The principal architectural historian focused and refined the historic context to address the most significant and relevant aspects of the area's history.

## ***Post survey data entry and preparation of reports***

The last phase of the project will include assembling the survey information and editing the DPR 523 forms, inserting the digital photographs and sketch maps into the CALCRD, reviewing and editing the Draft Historic Context, identifying possible future research and/or information gaps, providing a discussion of the results of survey and suggestions as to how the survey findings will be incorporated into the local planning process, and inserting and completing sources/notes, maps, formatting and citations for the Draft Historic Context.

16. *Preparing electronic sketch maps for CALCRD.* The project team scanned the most recently available topographic maps and aerial photographs of the project site, created sketch maps of each property that was more than 45 years old, and inserted the jpeg files into the appropriate sketch map form (DPR 523K). After the base map was scanned into the electronic DPR 523K forms, the project team outlined the parcel/property lines, significant buildings, structures, objects and/or features of the property onto a layer above the base map and label the sketch map to coordinate with the buildings identified in the property description on the Primary Record form (DPR 523A) and Continuation Sheets (if applicable). The sketch maps were then inserted into the CALCRD at a workstation located at the City of Ontario's Planning Department. As the survey developed, the sketch maps were used in the field for identifying the properties and for writing the building descriptions. The sketch maps were prepared and saved onto a CD and downloaded into the CALCRD at the City offices.
17. *Inserting electronic photographs into the CALCRD.* Using the photographs and photographic log that were prepared during the field survey in the second phase of the project, the project team inserted the condensed (if needed) jpeg photographs into the CALCRD and inserted information regarding the photo accession number, property address and APN, a brief description of photo for identification purposes, date photo was taken, and view (looking toward cardinal direction).
18. *Circulating the DPR 523 Forms for Peer Review and Editing.* The project team circulated the completed DPR 523 Forms for quality assurance/ quality control. All forms were reviewed by at least one team member. Sample forms were reviewed by OHP and City staff. Particular attention was directed toward the accuracy of information provided, completeness and uniformity of the property descriptions, spelling and grammar, and cross-referencing building addresses and parcel numbers with photographs and building descriptions to ensure an accurate inventory of all existing properties that are more than 45 years old.
19. *Identification of Properties that possess historic integrity that may require additional research for future intensive level evaluation.* Many of the properties located in the project area have been subject to extensive alterations such that they no longer appear to date to the period that they were constructed. The loss

or alteration of the property's building materials, design, workmanship, location, setting, feeling or association may result in a loss of integrity such that they would not be considered eligible for the National Register of Historic Places, the California Register of Historic Resources, or for local designation or listing if evaluated for historic significance in the future. Therefore, these properties would not need further evaluation. The project team identified those properties that they felt might have the potential for historic significance in the future, should they be evaluated and recorded at the intensive level in the future. The purpose of identifying potential historic properties as a result of the reconnaissance level survey is to assist the City in narrowing the scope for a future intensive level survey and/or identifying candidate properties for future individual study, evaluation, nomination, or for use with general planning and preservation incentives.

20. *Identifying appropriate historic contexts in relation to identified properties within the NMC.* The principal architectural historian drove through the project area and noted all of the properties located within the NMC and identified the relevant historic contexts for each property. This information is included in the appendices of this report for future reference.
  
21. *Mapping of groupings of properties by age, property type, and ethnicity to help guide understanding of potential historic districts, groupings by ethnicity, and historical development patterns.* This information was used to help clarify and guide the development of the historic contexts, as well as helping to refine the survey methodology. The results of the mapping are incorporated into this Draft Historic Context.
  
22. *Finalizing Draft Historic Context.* The principal architectural historian refined the Draft Historic Context and submitted to the City and project team members for review. This phase included incorporating comments from the City into the Final Draft Historic Context and to format and edit the Final Draft Historic Context. The Draft Historic Context was circulated among the project team for quality assurance/ quality control. Particular attention was directed toward the accuracy of information provided, completeness and clarity of the historic context statement, spelling and grammar, and formatting of sources/notes, maps, and citations.

## **Resume of Research and Repositories Consulted**

Archival research was conducted to direct the identification and description of general trends, groups, and events in the community's history and their known or likely effects on the community's development. The focus of the archival research was specific to the NMC project area, but also used general contextual histories from adjacent communities. This information was used as a foundation for developing the historic contexts for the project study area. The project team identified the contextual themes for developing a timeline for development, major events, and significant influences on the

settlement pattern of the area. The types of information that was gained from the archival research included major events and people, locations, facilities that are related to each identified historic context, major industries associated with identified historic context, ethnic groupings, reflections of the historic context through the built environment, and changes in the use of land as a result of identified historic context.

The archival research was conducted at local history museums, local historical societies, and city and county libraries. During the course of the pre-field research and development of this Draft Historic Context, the following repositories were consulted;

- **California Room of the California State Library**
- located in Sacramento, CA
- **City of Ontario Public Library**
- located at 120 East D Street, Ontario, CA
- **Model Colony History Room**
- located at 217 South Lemon Avenue, Ontario, CA
- **Old- Schoolhouse Museum, Chino, CA**
- **San Bernardino County Assessor's Office**  
Online Services located at:  
<http://www.sbcounty.gov/assessor/sbca2/OnlineServices/os.htm>.