

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM**

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Shafter Research Station

other names/site number Kern County Experimental Station

2. Location

street & number 17053 Shafter Avenue not for publication
city or town Shafter vicinity
state California code CA county Kern zip code 93263

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register Criteria. I recommend that this property be considered significant nationally statewide, locally. (See continuation sheet)

Samuel Abeyta September 2, 1997
Signature of certifying official Date

California Office of Historic Preservation
State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of commenting or other official Date

State or Federal agency and bureau

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4. National Park Service Certification
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I, hereby certify that this property is

- entered in the National Register
___ See continuation sheet.
determined eligible for the
National Register
___ See continuation sheet.
determined not eligible for the
National Register
___ removed from the National Register

Edson H. Beall 10/17/97

___ other (explain): _____

Signature of Keeper

Date of Action

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5. Classification
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Ownership of Property (Check as many boxes as apply)

- ___ private
[X] public-local
___ public-State
___ public-Federal

Category of Property (Check only one box)

- ___ building(s)
[X] district
___ site
___ structure
___ object

Number of Resources within Property

Table with 2 columns: Contributing, Noncontributing. Rows include buildings, sites, structures, objects, and Total.

Number of contributing resources previously listed in the National Register None

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)

N/A

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6. Function or Use
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Historic Functions (Enter categories from instructions)

Cat: Education research facility

Current Functions (Enter categories from instructions)

Cat: Education research facility

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7. Description
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Architectural Classification (Enter categories from instructions)

Mission/Spanish Colonial Revival
Bungalow/Craftsman
No Style

Materials (Enter categories from instructions)

foundation Concrete
roof Asphalt, shingle
walls adobe, weatherboard
other brick chimneys

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.) See continuation sheets.

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8. Statement of Significance
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Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
 B Property is associated with the lives of persons significant in our past.
 C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
 D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

- a owned by a religious institution or used for religious purposes.
 b removed from its original location.
 c a birthplace or a grave.
 d a cemetery.
 e a reconstructed building, object, or structure.
 f a commemorative property.

___ g less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)

- Agriculture
- Science
- _____
- _____
- _____

Period of Significance 1922-1947
 Significant Dates: 1925
 Significant Person: _____
 (Complete if Criterion B is marked above) _____
 Cultural Affiliation N/A

Architect/Builder _____

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.) See continuation sheet.

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9. Major Bibliographical References

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(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS)

- ___ preliminary determination of individual listing (36 CFR 67) has been requested.
- ___ previously listed in the National Register
- ___ previously determined eligible by the National Register
- ___ designated a National Historic Landmark
- ___ recorded by Historic American Buildings Survey # _____
- ___ recorded by Historic American Engineering Record # _____

Primary Location of Additional Data

- ___ State Historic Preservation
- ___ Other State agency
- ___ Federal agency
- X Local government
- ___ University
- X Other

Name of repository: Shafter Historical Society, Beale Library, Shafter Research Station, Bancroft Library

See Bibliography

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10. Geographical Data

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Acreage of Property Approximately 17.5 acres

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing	Zone	Easting	Northing	
1	<u>11</u>	<u>293240</u>	<u>3934310</u>	3	<u>11</u>	<u>293550</u>	<u>3933920</u>
2	<u>11</u>	<u>293570</u>	<u>3934310</u>	4	<u>11</u>	<u>293430</u>	<u>3933920</u>

___ See continuation sheet.

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.) See map.

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.) The boundaries encompass the greatest concentration of remaining historic resources and their immediate setting.

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11. Form Prepared By

=====

name/title Patricia P. Wilson, Nina Leigh (OHP revisions, May, 1997)
organization Shafter Historical Society date Nov 4, 1996
street & number 445 Pine Street telephone (805)746-6532
city or town Shafter state CA zip code 93263

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Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

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Property Owner
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(Complete this item at the request of the SHPO or FPO.)

name County of Kern

street & number 1115 Truxtun Avenue telephone (805) 861-2111

city or town Sacramento state CA zip code 93301

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Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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CONTINUATION SHEET**

Section 7 Page 1

**Shafter Research Station
Kern Co, California**

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The Shafter Research Station National Register property is an approximately 17 acre section of the 77 acre research facility. This section consists of a cluster of the original buildings and facilities together with about eight acres of cotton experimental fields. The facility is located in rural San Joaquin County. The individual elements of the nominated property are as follows. Please note that building numbers are not consecutive and that there are some missing numbers that are for buildings outside the nominated area.

Administration/Fiber Lab Building, constructed 1922 (Building 6 on map)

The original Administration/Fiber Lab building is a single story non-reinforced adobe structure with the original fiber lab in the basement. It is modestly Craftsman in style, with a wood shingle gable roof. This roof is now covered with composition shingles. A small, gabled porch is supported by simple pillars. The walls are 18 inches thick with an 8 foot ceiling height. Stucco covers the walls, inside and out. Windows are double-hung. An addition was added in 1953, elongating the rectangular floor plan on one end. The addition is apparent as it is built of concrete blocks with steel frame, 10-light casement windows. The addition has been stuccoed to blend with the original building. Today the building is used for storage and is in good repair. There are no cracks apparent in the walls. The building was built facing north on the entrance road of the research station.

Superintendent's House, constructed 1922 (Building 1 on map)

Behind the Administration/Fiber Lab building, the superintendent's home was built in 1922, facing east and the main county road, Shafter Avenue. This one story, single family dwelling is a wooden frame Arts and Crafts style bungalow. It is rectangular in plan, with walls finished in wood, shiplap siding. The gabled roof is of wood shingle with exposed rafter tails. The chimney is of clinker brick. The interior reflects the Arts and Crafts style in the built-in cabinetry. Windows are double-hung, multi-pane, but some have been replaced with 10-light casement windows popular in the late 40s. The front yard has large trees and a very large expanse of lawn. The driveway is in the rear. The back porch has been enclosed and is now part of the kitchen.

Laboratory and Cotton Seed Storage, constructed 1926 (Building 7 on map)

This is a rectangular non-reinforced adobe building with a screened-in front porch. Originally it had a shingle roof. It now has composition shingles. The windows are double hung. It has a concrete perimeter foundation with wood floors. The screened seed and storage area has been finished to create a room. A concrete block addition has been built at one end. Today, the building is abandoned. It is in bad repair, having multiple fissures in the adobe walls.

Original Greenhouse, constructed in 1930s (Building 20 on map)

The original greenhouse is made of wood frames, holding glass panels. It is typical greenhouse construction. Rectangular with concrete and gravel pad, it is believed to have been built in the 1930s. it

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**Shafter Research Station
Kern Co, California**

is located at the rear of the lab and seed storage building. There is a concrete block wainscot and head house, apparently added later. The roof was originally glass and metal. The glass panels in portions of the roof were removed and replaced with galvanized metal panels in the 1980s when the structure was converted from a greenhouse to a storage facility and enclosed project area.

Cotton Gin Building , constructed 1937 (Building 13 on map)

The original building housing the cotton gin is of galvanized metal panels. It is a two story building with only one level inside. There are two sets of steel case, 12 light windows on the east and west of the building. The six central lights of these windows open (transom style) to allow ventilation. Two oversized doors open to the east and north. An open shed roof to the west was added in the 1970s. This is open to the central utility yard and currently used to store farm equipment. There is a concrete slab under this entire building and a small concrete lined basement for the original lint press hydraulic cylinder. It is now used for storage and is located west of the original superintendent's house.

The remaining buildings in the district are not old enough to be eligible for listing. However, some are close to being fifty years old and will become eligible when they reach that threshold. Most are utility/storage buildings.

Gin for Experimental Plots, constructed 1965 (Building 26 on map)

It is located to the southwest of the superintendent's house. It is a pre-fab steel building built in 1965. It is two stories in height, but only the central half contains a second floor. The shaped metal panel exterior walls and roof are consistent with other steel buildings built in 1965. The building has oversize doors opening to the south and to the east. There are windows to the north. The exterior light green and cream color is original factory finished enamel. It is built on a concrete slab. Inside the south door is a high vacuum flume for unloading cotton trailers. The seeds are removed from the lint with modern but scale versions of ginning equipment. Associated equipment includes several seed cotton cleaning machines, cotton lint cleaning machines and a lint press to form 500 pound bales. A portion of bales produced goes to spinning mills to become fabric, however more than half of the bales are sent to special research and testing facilities for evaluation of the experimental cottons.

Bin House (seed cotton storage) constructed 1950 (Building 14 on map)

The bin house is south of the original gin on the site of a previous roller gin building. It is a three floor, two story building similar to the original gin. The entire building is of unpainted corrugated galvanized iron panels. It has exterior metal reinforcement steel running in a horizontal and "X" pattern. The metal roof is interrupted by a second small duct roof. This second roof runs the length of the ridge and contained a pneumatic conveyor to load the various bins within the building. There is one large door at each end and no windows. It has a concrete slab floor. A few of the bins are still used for storage of seed cotton, however, the majority of the bins are used for storage.

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**Shafter Research Station
Kern Co, California**

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Original Storage shed, constructed in 1956 or 1957 (Building 17 on map)

The original storage shed is of corrugated metal over wooden frame construction. The roof and walls are unpainted. It has a concrete slab floor. There is one door to the east and a large sliding door to the north. There are small windows on every side of the building, most of which have been boarded over. The building has powered full time ventilation and is marked with danger signs. A high security fenced area has been added to the south for chemical container storage. The building is now used for storage of agricultural chemicals. The building is west of the bin storage building.

Agricultural Engineering Shop, constructed 1951 (Building 18 on map)

The original agricultural engineering shop now used as a farm shop is located west of the original gin. It was built in 1951 as a shop/laboratory for the Agricultural Engineering Project. It has a steel frame and is covered with unpainted corrugated galvanized metal panels. It has oversized metal doors opening to the south and east. There is an open shed extension on the north. It is in the middle of a large, open utility yard.

Equipment Shed, constructed 1951 (Building 19 on map)

The equipment shed is a "pole-type" building covered with diagonal wood and a corrugated metal roof. One bay on each end of the building is open to the east. All other bays open to east and west with no divider walls, enabling equipment to be driven through. The roof has two levels to facilitate parking equipment of different heights. It has a dirt floor. It was built for equipment storage and is still used for that purpose.

Farm Equipment Shed, constructed 1958 (Building 22 on map)

This is a metal frame building with the walls and roof covered with unpainted galvanized metal panels. The pattern of the metal looks like a forerunner of pre-fabricated metal buildings. Two thirds of the building is open on the south side. The other third is enclosed with no windows, an oversize door to the west and a door on the south. There are ventilation turbines on the roof. It has a concrete slab floor.

Storage Building, constructed 1966 (Building 29 on map)

On the northern boundary of the district, bordering the entrance road is a storage building. This is of pre-fab steel construction. It has original light green factory finished enamel. The walls and roof are shaped metal panels consistent with pre-fab of the mid 1960s. The building is on a concrete slab and divided into smaller storage rooms with access only from the outside. The exception of the eastern bay, which has an oversize door opening to the east, all other bays are divided by a central wall with each room opening either to the north or south. There are vents in the walls.

The site of the Shafter Research Station is comprised of 77.24 acres of flat, sandy loam soil. This area is

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**Shafter Research Station
Kern Co, California**

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a working farm and provides the historic setting for the district. Today, as it was 74 years ago, acreage is divided into plots for field testing of crops and production practices. The 17.5 acre portion of the station was selected as the property proposed for nomination as it contains the largest concentration of historic buildings, plus several acres of experimental fields.

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**Shafter Research Station
Kern County, California**

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The Shafter Research Station is significant under National Register criterion A for the prominent role it has played in the development of the state's cotton industry. It is the place where the "One Variety" concept of cotton production was conceived, leading to California's commitment to the planting of high quality Acala cotton. Over the years, experimentation at the station has continued to assist growers and improve cotton and other crops. The station is significant today, but the period of significance has been ended at 1947, fifty years ago, because exceptional significance is not established.

In 1917, US involvement in World War I led to the need for increased airplane production. Because long-staple cotton was used in manufacturing airplane wings, The U.S. Department of Agriculture (USDA) sent W.B. "Bill" Camp, agronomist, to California to conduct cotton varietal experiments that could produce the required long-staple and strong cotton. Working with county agricultural agents, Bill Camp planted cotton test plots throughout California, Nevada, Arizona and New Mexico, eventually concluding that some of the finest soils were located in the San Joaquin Valley of California. By 1921, Camp's testing program became so extensive that the need for a localized experiment station was apparent. After gaining approval from the USDA, Kern County Land Company, a large land-holding company, leased (at \$5) 77.24 acres of land in the County of Kern. Subsequently, this land was purchased by the County of Kern and leased to the USDA until 1992, for the specific purpose of conducting research on cotton, primarily, and other crops that could be adaptable to the climate in San Joaquin Valley. With the acquisition of land, Shafter Research Station was born.

By 1922, construction began on the superintendent's residence and an office building at the experiment station, located two miles north of the town of Shafter. Both buildings are still functional, with the office building gaining an addition to provide space for laboratory work, as well as storage of business equipment and material. Currently, it also houses the district office for the Agricultural Commissioner.

From the station's inception, the land was used primarily for breeding and testing of various varieties of cotton, which encouraged the development of the cotton industry in California. By 1925, it was obvious to farmers, as well as researchers at the Shafter Station, that the finest cotton variety was Acala, named after the variety originally found in Acala, Mexico. Consequently, the breeding and testing programs focused on Acala cottons, leading to the formation of a "one-variety" concept for cotton in California. On May 22, 1925, the Governor of California signed the California One Variety Cotton Act, which was amended in May of 1961 to include only the San Joaquin Valley. The cotton industry that developed now includes over one million acres within the one-quality system. Because Acala cotton has long, uniform, strong fiber, the "one variety" act insured the California cotton industry a premium price. Currently, it is a \$1.3 billion crop for San Joaquin farmers, and, approximately \$3 to \$5 billion to the California economy.

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**Shafter Research Station
Kern County, California**

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Thus Acala cotton production is a major contributor to the California economy and to the international balance of trade for California and the United States. Unlike other crops produced in California the introduction of cotton to this state was a planned effort on the part of many organizations. These included the agricultural industry of California, University of California, USDA, several counties, individual farmers and cooperatives and the California State Department of Agriculture. These efforts were focused at the Shafter Research Station which has been called, in previous years, Kern County Experimental Station and later the US Cotton Research Station. Prior to 1922, cotton was a minor crop within California with no expected bright future. By 1996, due to the efforts of these organizations and remarkable individuals beginning in 1922, the cotton industry has become one of the most remarkable success stories for California.

Because the "one variety" cotton district was initiated at the Shafter Research Station, and the primary focus of research at the station continues to be cotton, the station has gained worldwide recognition by the cotton industry. Research and farmer organizations from all over the world make Shafter Station a required site for obtaining the latest research and production practices for their own countries and areas. In addition, the consortium of scientists from various disciplines continue to attract students from cotton-growing regions of the world, giving Shafter Research Station a reputation for being an outstanding research center on cotton as well as on other crops. The emerging cotton industries of Australia and Israel, for example, were based upon the seed and production information available at Shafter.

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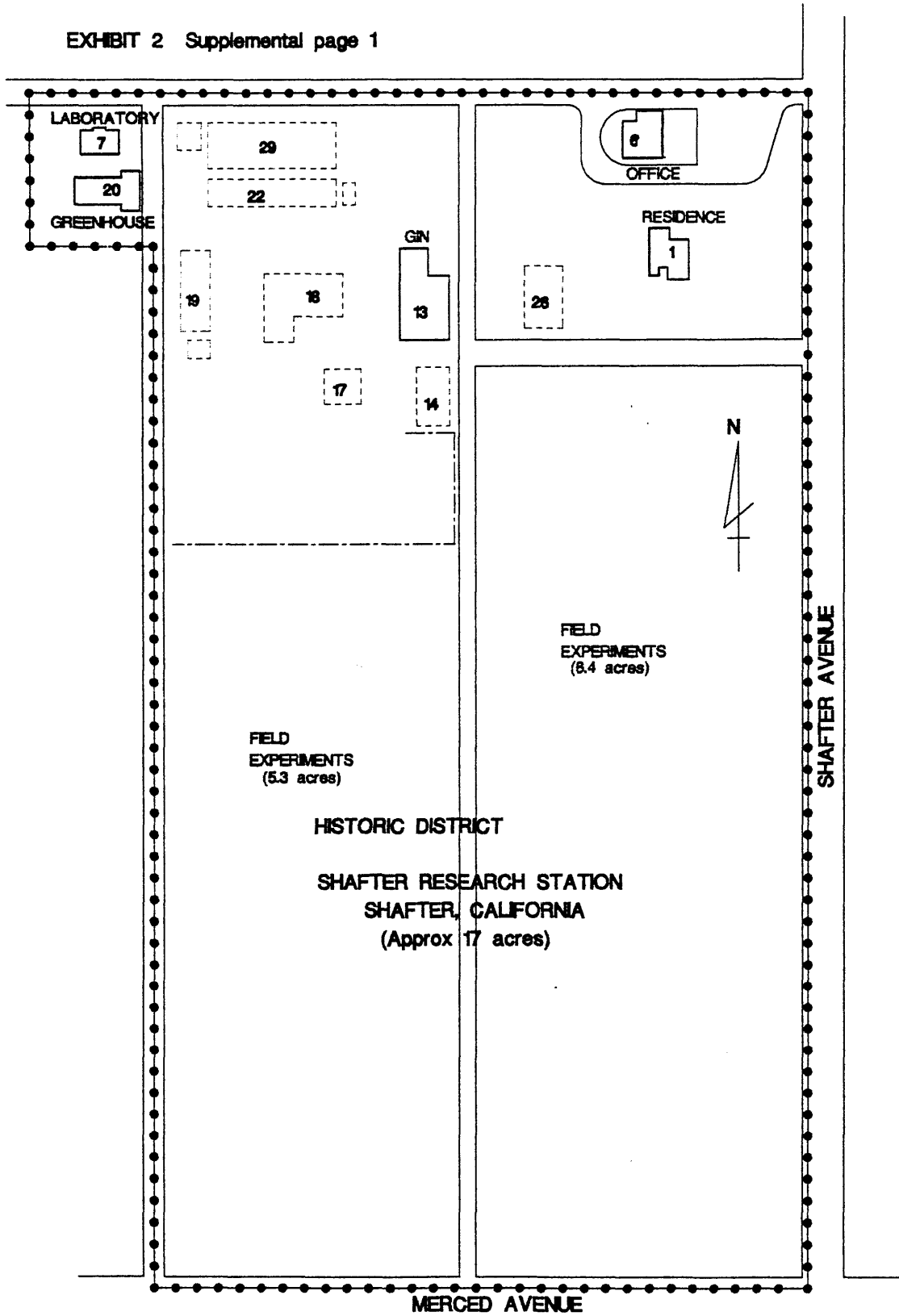
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1932 Annual Report from Shafter Station to Chief of Bureau of Plant Industry.



scale 1 inch = 150 feet

Kern County