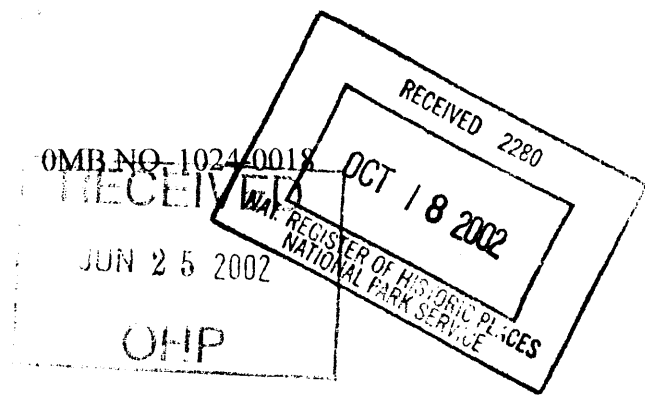


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1406



NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

1. Name of Property

Historic name: Phillips Brothers Mill

Other names/site number Phillips Historical Foundation

2. Location

street and number not for publication: _____

city or town Oak Run vicinity: x

state: California county: Shasta code: 089 zip code: 96069

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 Criteria. I recommend that this property be considered significant _____ nationally _____ statewide _____ locally.
(____ See continuation sheet for additional comments.)

J. M. Ellison
Signature of certifying official

9/11/02
Date

California Office of Historic Preservation

State of Federal agency and bureau

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

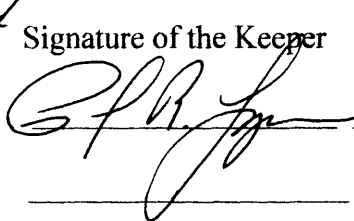
Signature of commenting or other official

Date

State or Federal agency and bureau
Phillips Brothers Mill, Shasta County, CA

4. National Park Service Certification

I, hereby certify that this property is:

<input checked="" type="checkbox"/> entered in the National Register	Signature of the Keeper	Date of Action
_____ See continuation sheet.		
<input type="checkbox"/> determined eligible for the National Register		12/2/02
_____ See continuation sheet		
<input type="checkbox"/> determined not eligible for the National Register	_____	_____
<input type="checkbox"/> removed from the National Register	_____	_____
<input type="checkbox"/> other (explain) _____		

5. Classification

Ownership of Property: private

Category of Property: district

Number of Resources within Property:

Contributing	Noncontributing	
<u>17</u>	_____	buildings
_____	_____	sites
<u>3</u>	_____	structures
_____	_____	objects
<u>20</u>	_____	total

Number of contributing resources previously listed in the National Register: 0

Name of related multiple property listing: N/A

Phillips Brothers Mill, Shasta County, CA

6. Function or Use

Historic Functions Industry/manufacturing facility/mill

Current Functions Industry/manufacturing facility/mill

7. Description

Architectural Classification

No style - Folk building methods of the Great Depression and World War II

Other description: _____

Materials: foundations concrete piers and wood roof: metal and wood
walls: wood and metal

Describe present and historic physical appearance.

x See continuation sheet

8. Statement of Significance

Applicable National Register Criteria: A

Criteria Considerations: N/A

Areas of Significance: Engineering
Industry

Period of Significance: 1933 - 1952

Significant Dates: 1933 - Steam Mill built
1945 - Returned from WWII and changed production

Significant Person (s) N/A

Cultural Affiliation: N/A

Architect/Builder: Phillips Brothers

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

x See continuation sheet

Phillips Brothers Mill, Shasta County, CA

9. Major Bibliographical References

See continuation sheet.

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
 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 office
 Other state agency
 Federal agency
 Local government
 University
 Other

Specify Repository: National Park Service/ Historic American Engineering Record

10. Geographic Data

Acreage of Property: 7.5 acres

UTM References:

	Zone	Easting	Northing		Zone	Easting	Northing
1.	10	585690	4508170	3.			
2.	10	585730	4508270	4.			

Verbal Boundary Description: See continuation sheet.

Boundary Justification See continuation sheet.

11. Form Prepared By

Name/Title The First Descendants of Phillips Family Trust (Sharon Hayes)
Street & Number 1308 Sunset Avenue
City or Town Chico state CA zip code 95926
Telephone (530) 342-0862
Date June 3, 2002

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7-A. SUMMARY DESCRIPTION

The nominated boundary for the Phillips Brothers Mill encompasses 7.5 acres in the Oak Run area. It is located approximately 30 miles northeast of Redding, and 5 miles east of Oak Run in northern California. The Phillips Brothers Mill is in a Sierra mixed forest of Ponderosa pine, incense cedar, Douglas fir, white fir, and California black oak. The mill complex is on gentle to moderate slopes ranging from 0 percent to 30 percent. A spring provides water for general sawmill operations.

Like so many small mills of that period, the mill started in this location in 1933, by supplying lumber for the building of homes, churches, schools, and bridges. Edmund Phillips and his eight sons jointly operated the steam sawmill until late 1941 when World War II began, resulting in a shutdown of the mill when the sons went off to war.

When the men returned from the front, Edmund Jr., Clayton, Arthur, and Lewis reopened the sawmill. Deciding they could not compete with the region's mass production lumber giants, the brothers decided to shift focus to manufacturing boxes - an industry regarded by lumber historians as "one of the most important wood-using industries in this country," and one the brothers believed they could operate on a more modest scale.

The mill includes the sawmill, the planing mill, the machine shop, and after World War II, the box factory. The brothers had cabins, a mutual cookhouse, and various sheds for equipment and machinery. A second cookhouse was built closer to the mill in about 1950.

7-B. PHYSICAL DESCRIPTION

A total of 13 steam engines of varying sizes and configurations power the Sawmill, Planing Mill, Machine Shop, and Box Factory. The steam engines drive a wide assortment of wood and metalworking machinery throughout the plant, many of the machines dating to the late nineteenth and early twentieth centuries. An additional steam engine powers an ice manufacturing plant adjacent to the sawmill.

Mill employees operate the sawmill about 20 days a year, cutting approximately 6,000 board feet of lumber daily when it is running.

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The sawmill, planing mill and machine shop are entirely steam powered; the box factory is about half powered by steam, with a diesel powered generator providing power for some machines. The mill's saw-filing system is set up to run off steam, but generally runs on electricity.

BUILDINGS

Main Sawmill

Contributing building – constructed in 1933-34.

The sawmill building is elevated to remain flat on a gradual down-slope from a small earthen-sided log pond supplied by a spring. The building is of post and beam constructions with peeled logs for a roof structure covered with corrugated metal. The mill foundation is a mixture of wood blocks and concrete piers. Although irregularly shaped, the sawmill is roughly 80 feet long (N/S) and 26 feet wide (E/W); the building is partially open sided, partially clad with barn boards, and partially metal clad. It contains shed additions for coverage of some machines and walkways to the east and west. The main roof slopes at about 40 degrees and has overhanging eaves. There is a lumber loading dock (tram) extending from the building to the north on a level with the sawmill. It is approximately 100 feet long and 10 feet wide. Barn board flooring extends throughout the structure.

Planing Mill

Contributing building – constructed in 1933-34.

The Planing Mill building, which sits approximately 8 feet east of the sawmill, also is elevated to remain flat on a down-slope, providing room beneath the structure for machinery and a power transmission system of line shafts and belting. Construction is primarily post and beams. The "L" shaped building is roughly 31 feet long (E/W) and 40 feet wide (N/S) on its west end and 20 feet wide on its east end. The foundation consists of a mixture of wood blocks and concrete piers. The structure is barn board sided, partially metal clad, partially open, and has a corrugated metal roof with overhanging eaves.

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Machine Shop

Contributing Building – constructed in 1937.

Barn board floor contains floorboards from the Cow Creek Mill. An elevated sawdust bin sits approximately 40 feet to the north.

The Machine Shop is approximately 500 feet northeast of the sawmill building. The shop is roughly 47 feet long (N/S) and 20 feet 2 inches wide (E/W). The south end of the building is dirt floored to accommodate a steam boiler powering the shop's small steam engine. The foundation is a mixture of concrete and wood blocks. Shop machinery occupies an elevated floor on the north half of the building. The shop is sided with barn-boards, has a barn-board floor and a metal clad roof with overhanging eaves. Natural light is provided by banks of fixed-pane, wood-frame, windows on the north, east and west sides. The window frames range from 62 inches tall to 66 inches tall and range from 34 inches wide to 36 inches wide. They contain window lights of varying dimensions (10" x 13 1/2", 22" x 15 1/2", and 10" x 28" being the most common) tied together with standard muntins. There are doors roughly measuring 98 inches tall by 42 inches wide on the north and south ends, and an equipment bay double door with an opening measuring 84 inches by 84 inches on the east side. The building also contains an elaborate system of overhead line shafts and belt systems to drive an array of metal – working machinery. Part of the power transfer system includes hand-made wooden pulleys.

Box Factory

Contributing Building – constructed in stages started in 1946 – 1963.

The south end of the Box Factory sits approximately 106 feet east of the Machine Shop. Irregular in shape, it is roughly 100 feet long (N/S) and 56 feet wide at its widest point (the building's south end). It is 40 inches wide at the north end, creating an open bay on the west side of the north end. Construction reflects a period of stages, culminating in 1963, with the addition of a second-story loft on the building's south end to accommodate the saw-filing room. A two-story metal building measuring roughly 20 feet by 20 feet is attached to the building's southwest corner to house a vertical steam boiler and other machinery. The building is largely post and beam construction, with an

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elevated working floor and dirt-floor basement. This area houses steam engines, line shafts and other machinery. The building is sided with barn-boards, partially open sided, metal clad, and has a corrugated metal roof with overhanging eaves. A small-elevated sawdust bin is approximately 45 feet west of the northwest end of the building.

Recently, adding windows, two suspended heaters and insulation has modified the Box Factory. It also has a diesel generator that provides electrical power for pneumatic saws, lighting, compressor, and a blower system. Steam still runs the planer and resaws.

Ice Manufacturing Plant

Contributing Building – installed in 1949.

The Shell Oil Company in Hamford area first used the Ice Manufacturing Plant. It was installed at the mill in the late 40s. It is anhydrous ammonia refrigeration unit powered by a small vertical steam engine. It is housed in a 14 foot by 20 foot building which is approximately 30 feet south of the southwest corner of the mill.

Sawdust House for the Box Factory

Contributing Building – constructed in 1947

This Sawdust House measures 8'6" x 8'6". It has barn board siding, a metal roof, and is supported by wooden piers that raise it 9 feet from the ground. It is 10 feet high. It is approximately 44 feet from the Box Factory.

Sawdust House for the Planing Mill

Contributing Building – constructed in 1934

This Sawdust House measures 12'6" x 11'. It has barn board siding, a metal roof, and is supported by wooden piers that raise it 4 feet off the ground. It is 14 feet high from the ground to the peak of the roof. It is approximately 40 feet from the Mill.

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Tool Shed

Contributing Building – constructed in 1934.

The Tool Shed is approximately 50 yards east of the Mill. It measures 10 feet by 10 feet with barn board siding and a metal roof. The door is on the north side and has a window on the east side.

Garage/Woodshed

Contributing building – constructed in 1936.

The Garage/Woodshed is approximately 60 yards east of the Mill. It measures 30 feet by 27 feet and is built on a slope that goes down towards the north. The woodshed is on the north side with an entrance on the east side. Post and beam are leveling the south side for the garage with a wooden floor. Three sides are clad in barn board siding, with the south side open. It has a metal roof with overhanging eaves.

Office

Contributing building – constructed in 1935.

The Office is approximately 50 yards east of the Mill. It measures 10 feet by 12 feet. It has shiplap siding with a metal roof that has overhanging eaves. It has wood and concrete piers for a foundation.

New Cookhouse

Contributing building – constructed in 1950.

The New Cookhouse is approximately 35 yards east of the Mill. It measures 32 feet by 16 feet with a five foot x 12 foot porch on the west side. It is built on a slope to the east, with a concrete basement on the east side measuring 10 feet by 16 feet. It is clad in shiplap siding and has a metal roof. It has been modified within for a dwelling.

60 Cat Shed

Contributing Building – constructed in 1934.

The 60 Cat Shed is approximately 65 yards southeast of the Mill. It measures 14 feet by 10 feet and has a dirt floor. It had barn board siding and a metal roof. It is open on the west side.

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First Bunk House

Contributing Building – constructed in 1936.

The First Bunk House is approximately 100 yards southeast of the mill. It measures 16 feet by 14 feet with post and concrete piers for the foundation. It has barn board siding with windows on the north side and the door on the south side. It has a metal roof with overhanging eaves.

Best Tractor Shed

Contributing Building – constructed in 1935.

The Best Tractor Shed is approximately 75 yards southeast of the Mill. It measures 18 feet by 24 feet and has a dirt floor. It is clad with barn board siding and a metal roof. It is open on the west side.

Arthur's Cabin

Contributing Building – constructed in 1937

Arthur's Cabin (for sleeping) is approximately 10 yards south of the Mill. It is 14 feet by 29 feet and is built on a post and concrete piers, and rocks (where applicable). It has barn board siding with a metal roof with overhanging eaves. It has windows on the east and west sides. There is a small porch on the north side with the entrance.

Lewis' Cabin

Contributing Building – constructed in 1937.

Lewis' Cabin (for sleeping) is located approximately 175 yards south of the Mill. It measures 12 feet by 14 feet with a 4 foot by 7 foot porch on the north entrance side. It has windows on the east and west sides. Barn board siding clads its sides and it has a metal roof with overhanging eaves.

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Old Cook House

Contributing Building – constructed in 1937.

The Old Cook House is located 225 yards southeast of the Mill. It measures 14 feet by 18 feet with a 6 foot by 18 foot porch on the east side. The foundation is graduating posts and cement piers as it is built on a slope to the east. It has barn board siding with the doors on the west and east sides, and two windows on the east side, a window on the north and a window on the west side. It has a shake roof with overhanging eaves.

STRUCTURES

Best 110 Horse Power Steam Traction Engine

Contributing Structure – purchased in 1914.

The Best 110 Horse Power Steam Traction Engine was manufactured by C. L. Best Tractor Company, San Leandro, CA, 1906. The Phillips Brothers Mill purchased it in 1914. The drive wheels are 8 feet in diameter, and the traction engine is 17 feet tall and 23 feet long. A descriptive catalog for this engine is part of the Phillips Brothers collections. This Steam Traction Engine stills runs when fired up, and has given many relatives rides at reunions!

Log Trailer

Contributing Structure – built by the Phillips Brothers in 1914-15.

The Phillips Brothers built the Log Trailer in 1914-15 to work in tandem with the Best Steam Traction Engine. The wheels were made from large pine slabs and iron tires were hand forged by Ed Phillips Sr. Fir pegs were used in the wheel construction. The frame is 6 inch by 8 inch oak timbers. The trailer is 153 inches long and 100 inches wide across bunkers. It is 89 inches between wheels and has a drawbar 10 feet by 5 feet long. It was used for hauling logs from the woods to the sawmill towed by the Best Steam Traction Engine.

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**Caterpillar “Sixty”, No. 3368A Crawler Tractor
Contributing Structure – purchased in 1947.**

Caterpillar Company, Peoria, Illinois, 1925, manufactured the “Sixty” Caterpillar. The manufacture nomenclature plate also carries names of C. L. Best Tractor Co., San Leandro, California and C. W. Holt Manufacturing Co., Peoria, Illinois—which merged in 1925 to become the Caterpillar Co. This is a four-cylinder gas fueled machine. Parts catalog for this engine is part of the Phillips Brothers collections.

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8-A. SUMMARY STATEMENT OF SIGNIFICANCE

The Phillips Brothers Mill, and its steam engines, antiquated machinery, whirling belts and shafts, well represents the small, limited production steam sawmill facilities operating from the late 1800's through the Great Depression era across the inland pineries stretching from Northern California to Idaho and eastern Washington.

It is the only steam mill of its kind in the United States still doing production work today with machinery and equipment dating back to the late nineteenth and early twentieth centuries.

The Redding Search Light – the Redding newspaper – had an article the summer of 1998, stating they had found the last steam-powered mill in the Northwest. It was the Hull Oaks Mill near Salem, OR. We visited that mill and found that it was only about 20% steam operated and 80% electric. We contacted Richard O'Connor, a Historian of the National Park Service, in Washington D. C., and informed him of our mill. Six months later we sent him a video of our mill in operation. Within two weeks Richard O'Connor* and Hank Florence* from Seattle, WA, came to look at our place. They arranged a grant to have the place inventoried. George Wisner was chosen to do the work. Wisner has been doing historical documentations for over 20 years. Wisner stated as he knew it, that there were 5 steam-powered mills still in the U. S. Two of these were co-generated (electric and steam), one was a derelict – rotting away, one was for demonstration - purposes only, and we were the only ones still doing production work by steam. * See Section 9 – National Park Service.

8-B STATEMENT OF SIGNIFICANCE

Historical Background.

The Homestead Act of 1862 encouraged the agricultural settlement of the trans-Mississippi West. Throughout the Cascade and Sierra regions of the Pacific Northwest, these land laws were used to obtain potentially valuable, but non-arable forestland. Additionally, the Preemption Land Law of 1841 and the Timber and Stone Act of 1878 enabled the transfer of millions of acres of federal timberland to private citizens, with much of this land winding up in the hands of timber companies. Additionally spurred by

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the 1848 discovery of gold at Sutter's Mill, logging and lumber production was well on its way of becoming a major industry for northern California, becoming a rich part of the region's heritage. While the Sierra pineries had no immediate route to far-flung markets such as the Pacific Ocean afforded coastal redwood sawmills, that began to change after the Oregon and California Railroad reached Chico, California in 1870, and Redding by 1872 to give reliable product transport to major cities. While many of the region's lumbering legends swirl around the giant redwoods of the California Coast, considerable activity soon flourished throughout the northern interior where water, and then steam, powered sawmills were cutting lumber to meet expanding local needs for building materials as early as the 1840s. There were a dozen sawmills producing 4.9 million board feet of lumber in the county by 1860. It wasn't long before large sawmill enterprises such as the Empire Lumber Co., C. F. Ellsworth, Sierra Lumber Co., and the Diamond Match Co. became large players in the region's lumber game, processing millions of board feet of lumber yearly. After steam power came into Northern California, larger mills were able to bring railroads into the forest to bring out logs. This enabled them to expand at a faster pace than the smaller mills that usually built near their timber source. These smaller mills then logged off their resources to the point they couldn't sustain themselves, with few exceptions. Most of the small mills that survived turned to electrical power as it became available. It was easier to convert to electricity instead of maintaining belts, shafts, steam engines, and boilers.

From a cold start a boiler needs to have a slow fire for 4 or 5 hours to heat up the metal then approximately 2 more hours to build up steam pressure. Too much heat too soon could cause the boiler to explode. As for electric power, after the initial installation of electric motors, it was just a flip of a switch. From an efficiency standpoint, electrical power was more practical.

Isaac Phillips homesteaded the Shasta County area in 1854, settling near Millville approximately 20 miles east of Redding on south Cow Creek. His son, Edmund, opened the first Phillips sawmill in 1897, as a water-powered mill on their homestead along Little Cow Creek, approximately four miles northeast of the present mill. The wheels, levers, and noise of sawmills had fascinated him since the age of 5, when his father had taken him to visit a nearby sawmill. With a skill for tinkering and blacksmithing, Edmund and his brother Frank built the sawmill with hand-hewn logs and used equipment that included log carriage headblocks that remained part of the Phillips Brothers Mill today.

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An overshot water wheel provided mill power at first, with later modifications including a Pelton water wheel to increase speed and efficiency, a wheel that remains on site.

The Phillips Brothers at first cut lumber with a “muley” saw that moved up and down through each log; after installing the Pelton wheel, they added a circular saw for primary log cutting. In 1914, they also purchased a 110 horsepower Best brand steam traction engine for log hauling, a move that got them away from horse logging and enabled them to haul more logs at a time for processing. The traction engine remained in use until the late 40s, hauling its last load in 1947, when it was replaced with a crawler tractor. Fire destroyed the first Phillips Mill on May 13, 1913. They rebuilt on the same spot in 1914. The sawmill remained operational until the site flooded in 1933 and the mill was moved to its present location and rebuilt in the vernacular tradition, without benefit of formal plans.

In 1933, Edmund Phillips and his eight sons, Clayton, Clifford, Edmund Jr., Arthur, David, Lewis, Norman, and Elmer jointly operated the sawmill. They produced lumber for the Shasta Co. area until late 1941. When World War II began, it resulted in a shutdown of the mill while the sons went off to war. When the men returned from the front, Edmund Jr., Clayton, Arthur, and Lewis reopened the sawmill. Deciding they couldn't compete with the region's mass production sawmills, the brothers decided to shift focus to box production, making boxes for the farmers in the Sacramento Valley. This change of emphasis from the production of lumber to the management and growing a healthy forest to support a diversified ecosystem is the reason they could continue producing boxes by steam. Only selective logging techniques were used to harvest dead, dying, and diseased trees. This salvage lumber was used to produce boxes for the local farmers. These boxes were hauled up and down the Sacramento Valley as crops were harvested. Apples, pears, peaches, tomatoes, and other produce were transported in their boxes.

Armed with post-war government rehabilitation grants, and a love of steam-powered Machinery, the brothers began building a large planing mill that quickly evolved into a box factory when they concluded they couldn't effectively compete with larger lumber suppliers. With Edmund Jr. taking the lead, the brothers also started a long-term project of buying used machinery (steam engines, boilers, wood and metal working machines) to furnish the box factory, provide spare parts for existing machinery, and to upgrade existing machines or provide an inventory for possible future expansion.

The major purchasing flurry occurred between 1948 and the late 1960s when other sawmills riding the industry's recurring boom and burst cycles retooled or closed their doors and liquidated. While building up an inventory of machines that were rapidly becoming antiquated, but well suited to their specialty, the brothers devoted their lives to

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modifying and building their manufacturing enterprise as much for enjoyment as for money. Living a Spartan existence in tiny cabins with few amenities on the mill site, the brothers declined to embrace emerging electrical technology in favor of retaining steam power

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9. REFERENCES

Books

- Andrews, Ralph W. This Was Sawmilling. Atglen, Pennsylvania: Schiffer Published Ltd., 1994.
- Brown, Nelson Courtland. Forest Products: Their Manufacture and Use. New: John Wiley & Sons, Inc., 1927. (for detailed discussion of box manufacture)
- Ellis, Lucia. Head Rig: Story of the West Coast Lumber Industry. Portland, Oregon: Overland West Press, 1965.
- Ficken, Robert E. The Forested Land: A History of Lumbering in Western Washington. Seattle: University of Washington Press, 1987.
- Hills, Richard Leslie. Power from Steam: A History of the Stationary Steam Engine. Cambridge; New York: Cambridge University Press, 1989.
- Hutchinson, W. H. California Heritage: A History of Northern California Lumbering. Santa Cruz, California: Forest History Society, Inc., 1983 (for in-depth discussion of the growing lumber enterprise)
- Norbeck, Jack. Encyclopedia of American Steam Traction Engines. Glen Ellyn, Ill.: Crestline Publishing, 1976.
- Watkins, George. The Steam Engine in Industry. Ashbourne, England: Moorland Publishing, 1978-79.
- Wisner, George B. Trees to Lumber, The McDonald-Dunn Forest: A Historic Look At Sawmilling. Corvallis, Oregon: Oregon State University Bookstores, Inc. 1992.

Theses, Documents, catalogs, and Journals

- Atlas Engine Works Engines and Boilers catalog, book No. 122. Atlas Engine Works. Indianapolis, Indiana. No publication date listed. Smithsonian National Museum of American History collections, Smithsonian Institution, Washington, D.C.

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- Best Tractors Model S. "Thirty," General Instructions and Parts Book No. 3
San Leandro, California, 1906. Phillips Brothers collections.
- Best Manufacturing Company catalog for The 110 Horse-Power Traction Road Engine. San Leandro, California, 1906. Phillips Brothers collections.
- Chapin, James D. Non-Industrial Timber Management Plan for the Phillips Family Trust. Redding, California. Shasta Land Management Consultants, 21, April 2000. Phillips Brothers collections.
- Covel-Hanchett Co. Saw Sharpeners catalog, Bulletin 103-9. Big Rapids, Michigan Covel-Hanchett Co., no date listed. Phillips Brothers collection.
- Cyclops 4-1/2 x 5 Engine and 3-1/2 x 5 Ammonia Compressor, blueprints. San Francisco, California: Cyclops Iron Works, 1919. Phillips Brothers collections.
- Johnson, Beulah. Chips and Sawdust: A History of sawmills, the Equipment they Used and the Towns That Built Around them. Press Room, Inc., Redding, California (for discussion of sawmill growth in Shasta County)
- Manzel Force Feed Lubricators, Model 25 catalog. Buffalo, N.Y.: Manzel Brothers Company, 1948. Phillips Brothers collections.
- Manzel, Joe. "The First Homesteaders in Montgomery Creek." Covered Wagon Journal of the Shasta Historical Society, Redding, California (1991): 49-57.
- Montgomery, Bruce. Wooden Container Industry, May 1971. Washington, C.D. U. S. Bureau of Labor Statistics, 1974.
- "Phillips Forest at Oak Run." In Pacific Forests, Vol. 2, No. 1. Booneville, California: Pacific Forest Trust (1999): 3.
- Phillips Historical Foundation Mission Statement and Bylaws (Draft). Oak Run, California, 2000. Phillips Brothers collections.
- Rouse, Ernest R. Forest Management Plan for Clayton A. Phillips, Et. Al., Property at Oak Run, California, 1997. Phillips Brothers collections.
- Shuford, Beth. "Logging in Shasta County." Covered Wagon journal of the Shasta Historical Society, Redding, California (1957): 34-36.
- Smith, Thelma Phillips. "Issac Wheeler Phlllips and Emma Ann Hicks." Covered Wagon journal of the Shasta Historical Society, Redding, California (1991) 29-37.

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Stauffer, Esther Strayer. "The Oak Run Community." Covered Wagon journal of
The Shasta Historical Society, Redding, California (1973) 15-22.

Stauffer Esther Strayer, "Romance by Mail: The Story of the Phillips Mill,"
Covered Wagon journal of the Shasta Historical Society, Redding, California
42-48, 70.

U.S. Department of Agriculture, Forest Service. Wooden Box and Crate
Construction. Forest Products Laboratory, Madison, Wisconsin, 1921.

Ward, Ethel Saxon. "Pioneering in Lumber Transportation." Covered Wagon journal
of the Shasta Historical Society, Redding, California (1964) 32-36.

Wisner, George B. "Phillips Brothers Sawmill and Box Factory Machine Survey
Report," Prepared for: National Park Service/Historic American Engineering
Record, Nov. 8, 2000.

National Park Service

Florence, Hank, Historical Architect
U.S. Dept. of Interior
National Park Service
Columbia Cascade Support Office
909 1st Ave.
Seattle, Washington 98104-1060

Phone number: 206-220-4133

Email: hankflorence@nps.gov

O'Connor, Richard, Historian
Historic American Engineering Record
National Park Service
1849 C Street NW Room N.C. 300
Washington D.C. 20240

Phone number: 202-343-3901

Fax number: 202-343-9624

Email: richardoconnor@nps.gov

Phillips Brothers Mill, Shasta County, CA

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OMB No. 1024-0018

**United States Department of the Interior
National Park Service**

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Phillips Brothers Mill Page 16

Verbal Boundary Description

The Phillips Brothers Mill is located approximately 30 miles east of Redding, California, and 5 miles east of Oak Run. Assessor's parcel #098-600-002-000 is where it is located..

Boundary Justification

The proposed boundary for the National Register nomination for The Phillips Brothers Mill, is approximately 7.5 acres. The north and east boundaries are just beyond the Box Factory, the south boundary is just beyond the Old Cook House, and the west boundary is just beyond the Mill. Within these boundaries are the nominated buildings and objects.

Phillips Brothers Mill, Shasta County, CA

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Section number Photographs

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Gary Hendrix except where noted took the photos in April 2002. Sharon Hayes has the negatives.

#1 Machine Shop

- a. East side of the Machine Shop
- b. South side of the Machine Shop
- c. The southwest corner of the Machine Shop
- d. Inside the Machine Shop, a metal lathe manufactured by New Haven Manufacturing Co., New Haven, Connecticut, in 1890
- e. Single-cylinder horizontal mill steam engine. Manufacturer unknown, estimated date of manufacture is 1915 and is used in the Machine Shop

#2 Box Factory

- a. North side of the Box Factory
- b. South side of the Box Factory with boiler room on the left.
- c. Northwest side of the Box Factory
- d. Twin band saws manufactured by Mershon & Co., Saginaw, Michigan, ca. 1924 used in the Box Factory.
- e. Twin automatic Paxton nailing machines manufactured by the Ford Machine and Chemical Corp., Riverside, CA manufacturing date unknown, installed in the Box Factory in 1948.
- f. Band resaw manufactured by Mershon & Co., Michigan, and carrying patent dates of October 16, 1906 and April 22, 1913 used in the Box Factory.

#3 Steam Sawmill

- a. A relationship picture of from left to right: Sawdust House for Mill, Planing Mill and the Sawmill looking from the north.
- b. The loading dock (tram) north side of the Sawmill
- c. West side of the sawmill
- d. Steam engine that drives primary lumber saw or "head rig," carriage, and edger. It was manufactured by Atlas Engine Works of Indianapolis, Indiana, ca. 1905
- e. Twin circular saws as main "head rig" or primary lumber-cutting saws. They are believed to have been homemade in 1897. The saw blades have removable teeth for ease in sharpening. Upper blade is 44" in diameter, lower blade is 52" in diameter. This head rig can cut logs up to 4 feet in diameter and 30 feet long.

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3 Steam Sawmill (continued)

- e. (continued) To the right of the head rig is the carriage. Manufacturing date is unknown. The Allis-Chalmers brand carriage was purchased and used ca. 1950 and highly modified by Edmund Phillips. The carriage frame is 17 feet long, and approximately 89 feet wide with 10 feet between its head blocks. It is steam powered with cable drive and capable of handling logs up to 4 feet in diameter and 30 feet long.
- f. Edger manufactured by California Saw Works, San Francisco, California, ca.1895. The edger is belt driven off main Atlas steam engine.

#4 Planing Mill

- a. North side of the Planing Mill with the Mill's sawdust house on the left.
- b. East side of the Planing Mill
- c. South side of the Planing Mill
- d. Planer built by Hall & Brown Wood Working Manufacturing Co., St. Louis, Missouri, ca.1895. Purchased from the Diamond Match Co., Chico, California In 1906. It will plane boards 13" wide and 6 " thick.
- e. Gilbert bandsaw, No. 2; patented April 16, 1896, manufactured by Saginaw, Michigan. It is used to resaw lumber for siding and flooring. It is 12 feet tall With 54" diameter drive wheels; driven by under-the-floor Ames Iron Works Steam Engine and will take boards up to 22" wide.
- f. Yates 281 ripsaw, Model No. 50094, patent dates run from Jan. 10, 1904 to 1922Manufactured by A. B. Yates Machine Co. , Beloit, Wisconsin. It is 10 feet tall with 44" diameter drive wheel; belt driven off under-the-floor Atlas Steam Engine.

#5 Ice Manufacturing Plant

- a. Northeast side of the Ice Manufacturing Plant

#6 Sawdust House near Box Factory

- a. Northeast side of the Sawdust House

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Section number Photographs

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- #7 Sawdust House for the Planing Mill
 - a. Northwest corner of the Sawdust House
- #8 Tool Shed
 - a. Southeast corner of the Tool Shed
- #9 Garage/Woodshed
 - a. Southwest corner of the Garage/Woodshed
- #10 Office
 - a. Southwest corner of the Office
- #11 New Cook House
 - a. Northwest corner of the New Cook House. It has been turned into a residence.
- #12 "60" Caterpillar Shed
 - a. A southwest view of the "60" Caterpillar Shed with the "60" Cat. Inside.
- #13 First Bunk House
 - a. The Northwest corner of the First Bunk House
 - b. The Southwest corner of the First Bunk House
- #14 Best Traction Engine Shed
 - a. Northwest view of the Best Traction Engine Shed with the Best Engine in it.
 - b. North view of the Best Traction Engine Shed and a back view of the Engine
 - c. Best Traction Engine on May 25, 1997 (Picture in Reunion Album taken by Sharon Hayes.)
- #15 Arthur's Cabin
 - a. Northeast view of Arthur's Cabin
 - b. Northwest view of Arthur's Cabin

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- #16 Lewis' Cabin
 - a. Northwest view of Lewis' Cabin

- #17 Old Cook House
 - a. The Northeast side of the Old Cook House
 - b. The Southwest side of the Old Cook House

- #18 Mill Pond
 - a. Mill pond, south side of Sawmill, boiler, and south side of Planing Mill hidden by trees

- #19 Logging Cart - homemade
 - a. Traction Engine pulling a load of logs on the Logging Cart in 1929. It pulled its last load on Aug. 5, 1947. (The picture is in a genealogy album; Thelma Smith took the picture.)

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Section number Sketch Map

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**Phillips Brothers Mill
Shasta County
Oak Run, California**

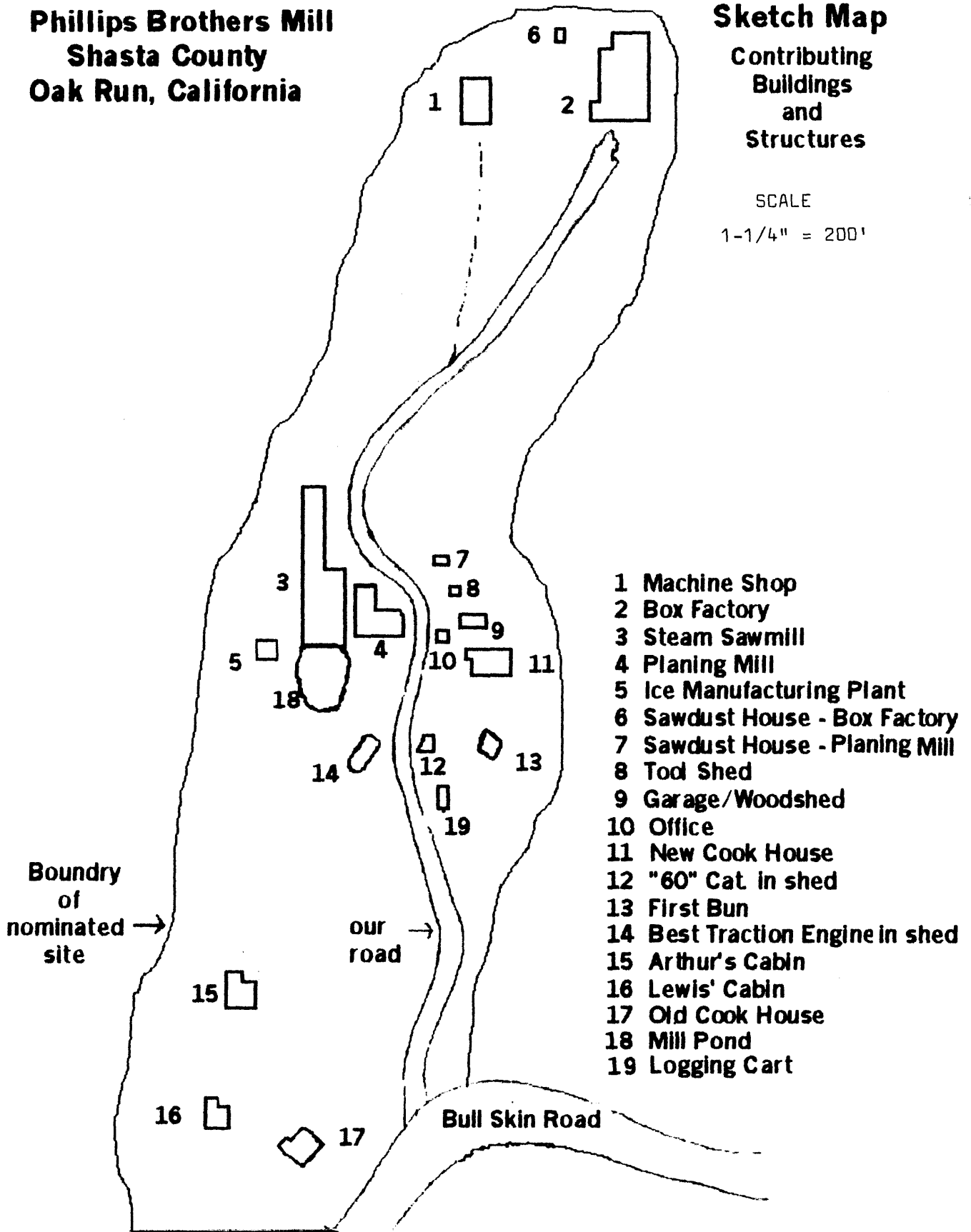
N

Sketch Map

**Contributing
Buildings
and
Structures**

SCALE

1-1/4" = 200'



- 1 Machine Shop
- 2 Box Factory
- 3 Steam Sawmill
- 4 Planing Mill
- 5 Ice Manufacturing Plant
- 6 Sawdust House - Box Factory
- 7 Sawdust House - Planing Mill
- 8 Tool Shed
- 9 Garage/Woodshed
- 10 Office
- 11 New Cook House
- 12 "60" Cat in shed
- 13 First Bun
- 14 Best Traction Engine in shed
- 15 Arthur's Cabin
- 16 Lewis' Cabin
- 17 Old Cook House
- 18 Mill Pond
- 19 Logging Cart

Boundary of nominated site →

our road →

Bull Skin Road

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**National Register of Historic Places
Continuation Sheet**

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 02001406

Date Listed: 12/2/2002

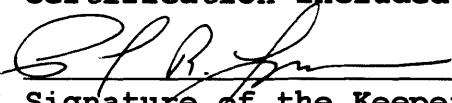
Phillips Brothers Mill
Property Name

Shasta
County

CA
State

N/A
Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.


* Signature of the Keeper

12/2/02
Date of Action

=====
Amended Items in Nomination:

Location:

The location is amended to read: *Bull Skin Road; approximately 30 miles NE of Redding.*
[All nominations must include some form of locational information.]

Certification:

This verifies that the submission was approved by the SHPO as a *nomination* for a property that *meets* the National Register Criteria at the *state* level.
[The nomination Certification Block was incompletely filled out.]

Description:

Building #6-Sawdust House. The construction method of the resource includes: *a "studs-out" structural framework with horizontal flush board siding typical of silo/storage buildings.*

(Continued)

These revisions were confirmed with M. Lortie of the CA SHPO office.

DISTRIBUTION:

National Register property file
Nominating Authority (without nomination attachment)

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 02001406

Date Listed: 12/2/2002

Phillips Brothers Mill
Property Name

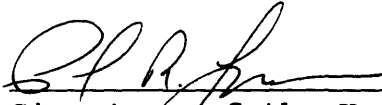
Shasta
County

CA
State

N/A

Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.


Signature of the Keeper

12/2/02
Date of Action

=====

Amended Items in Nomination:

(Continued)

Description:

Building #8-Tool Shed, Building #15-Arthur's Cabin, Building #16-Lewis' Cabin, and Building #17-Old Cook House all feature *board-and-batten siding* of rough, unfinished barn boards.

Building #13-First Bunkhouse contains both *board-and-batten siding and barn board siding*.

Building #15-Arthur's Cabin is located approximately *150 yards* south of the sawmill, based on the attached sketch map.

Verbal Boundary Description/Justification:

The Verbal Boundary Description is amended to refer to the attached sketch map, since the Assessor's parcel refers to a larger area than is nominated. The boundary justification is amended to note that the bounds were drawn to encompass the full extent of the historic resources directly associated with the milling complex and the immediate surroundings sufficient to provide a sense of historic setting and orientation.

These revisions were confirmed with M. Lortie of the CA SHPO office.

DISTRIBUTION:

- National Register property file
- Nominating Authority (without nomination attachment)