



Welcome to James J. Hill's North Oaks Farm on the National Register of Historic Places

The farm was nationally known for its experiments in breeding and feeding cattle, hogs, horses and other farm animals, and played a major role in the westward settlement of the U.S.

Restoration of the three remaining buildings to late 1880's status and for the use of the community started in 1989 with the incorporation of the Hill Farm Historical Society.

This self guided tour will step back in time to tell you about the farm

Start your tour at the four panel display north of the entrance. Orient yourself noting north (towards the red granary) on the site map.

Read about James J. Hill and his North Oaks Farm on the west facing panels; then look at the site map and read about the farm buildings on the east facing panels.



There's more to see than meets the eye

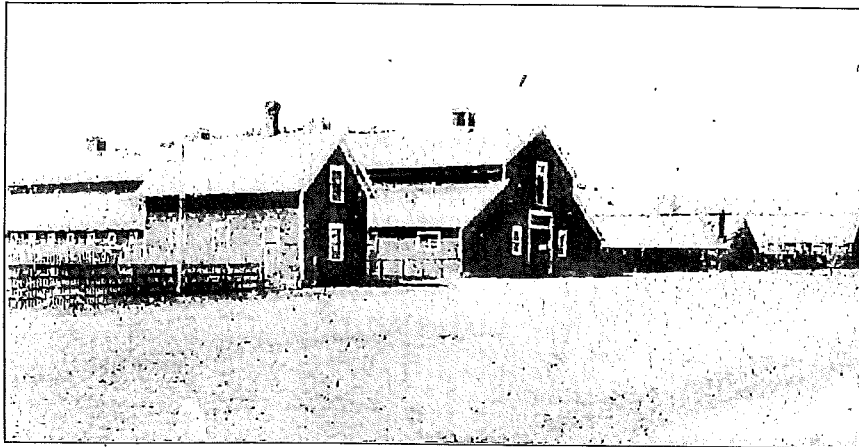
On the farm as well as at his Summit Avenue home, Hill was on the cutting edge of technology. In 1880's and 1890's newspaper articles that describe the farm, reference is made to engine houses that sent steam power underground to the farm buildings. Horse barn machinery was operated by a long shaft extending underground about 110 yards from the blacksmith/machine shop where the power equipment was located. A sand filled pit in the floor appears to be the access to the shaft. Other innovations will be pointed out as you tour.

**With this background information,
you are ready to start the tour**

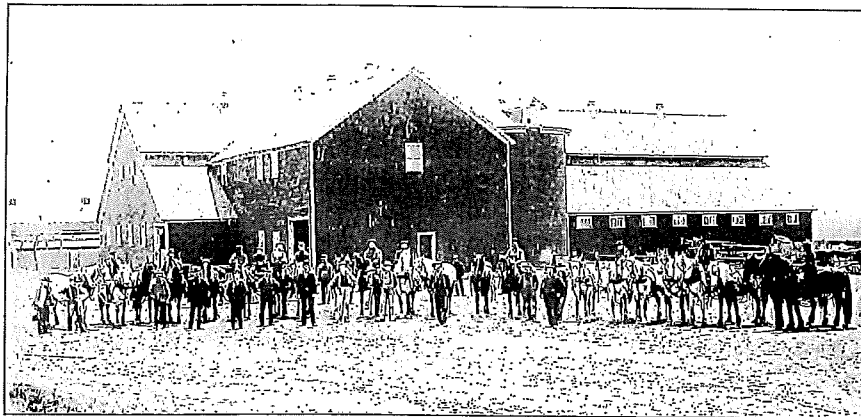


North Oaks Farm had over 30 buildings

Visualize standing on Red Barn Road where it joins West Pleasant Lake Road (open up to site map).



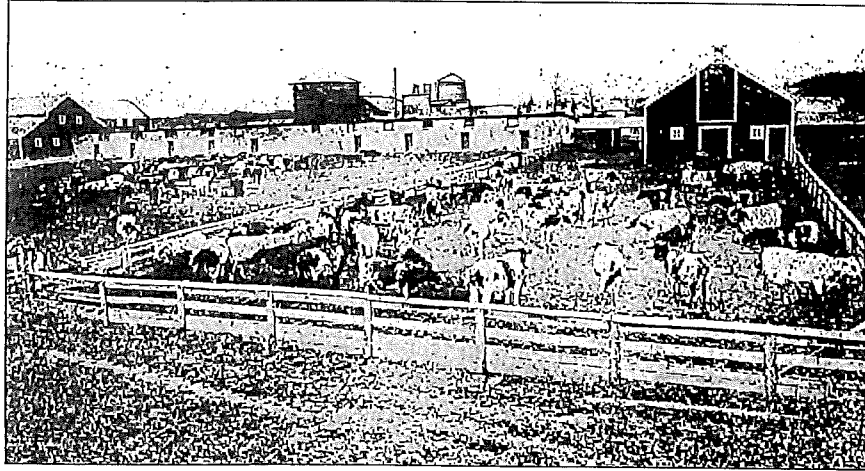
Looking northward in the late 1880's, you would see a 200 foot wide roadway. On the west side of the road are (from front to back) the office, carriage horse stable, hog barn and work horse barn (see below).



Over 80 teams of horses and wagons were needed for work on the farm. The house presently on this site would fit into this horse barn with room to spare.

Hill also kept fine harness horses, primarily Morgans, and commuted from St. Paul to the farm by horse carriage using Rice Street which at that time was only a dirt road.

On the east side of the road, the long building is the cow barn and to the right is a bull barn. In the background are (from left) the horse barn, a large silo in the cow barn, the roof of the granary (red barn), the cupolas on the dairy, and a large water tank. The cow barn was the location of the North Oaks Riding Club from 1950 to 1980.



During the 1880s, Hill spent more than a quarter million dollars (equivalent to over \$5.5 million today) to purchase the finest blood line of polled Angus beef cattle and Shorthorn dairy cattle from England and Scotland. To support settlement in North Dakota and the development of his railroad, from 1884 to 1886, Hill gave 160 bulls to farmers along the rail line to improve the quality of their cattle. This was an average of five pedigreed herd sires in each of the 30 counties which the railroad served.

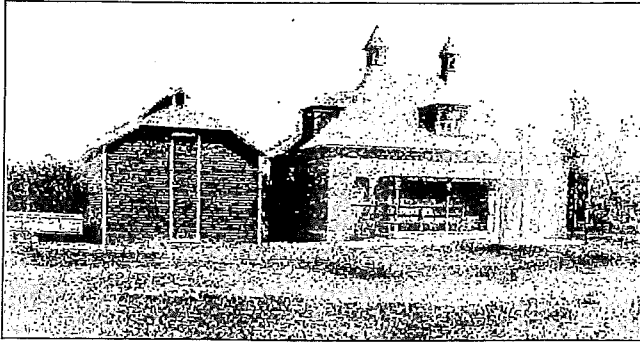
At the 1885 Chicago Fat Stock Show, North Oaks cattle won seven first prizes including a prestigious award for "best steer".

In 1897, Hill purchased Ayrshire cattle, a dual purpose (good for both beef and milk) breed popular in Vermont and eastern Canada. By 1913, Hill had distributed at no cost to farmers no less than 7,000 head of the best cattle he could buy, including 800 thoroughbred bulls, and more than 6,000 hogs of prize stock.

Some of the imported cattle received royal treatment. Sweet Pea, a gentle cow, was shipped from the East coast in a special heated railroad car escorted by an attendant. Sometime earlier, Grand Duchess 43rd, an imported shorthorn cow worth \$5,000, burned to a crisp in a stock car en route from the East coast. Hill was determined that nothing should happen to Sweet Pea!

Never underestimate James J. Hill

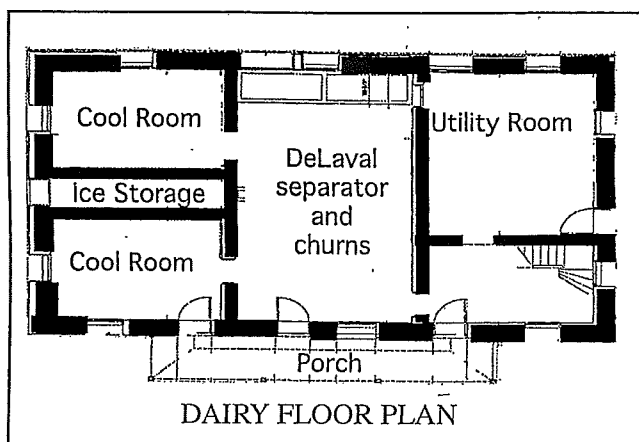
Walk eastward to the brick dairy building with the two cupolas on top (A on the site plan).



The dairy building, also referred to as the creamery, was built in 1883. Butter production which was the sole use of the dairy, started in 1884 with 417 pounds made in July. The butter was used at the farm's boarding house, at Hill's farm home and house in St. Paul and was sold for 35 cents per pound to Hill's St. Paul friends and neighbors.

The latest innovative equipment of the time was installed in the dairy. At the Minnesota Dairymen's Convention in March 1885, Elizabeth Leggatt, the young woman who operated the dairy, explained to the unknowing dairy farmers how the new DeLaval separator, the first in Minnesota, operated. Using centrifugal force, the cream was separated from the milk. Cream went into one bucket and milk into a second bucket! The amazed farmers were full of questions about this innovative machine. A DeLaval of the same vintage as the original machine is in the dairy building.

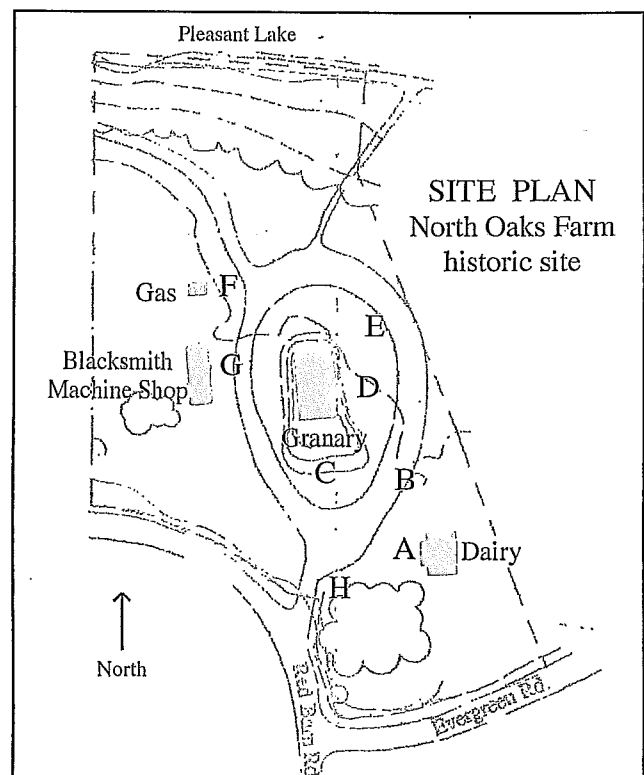
The design of the building is an example of the innovations associated with Hill in his many ventures. In summer, to insure cool, sterile atmosphere, the walls are 24 inches thick; an inner and outer door are in each opening to the



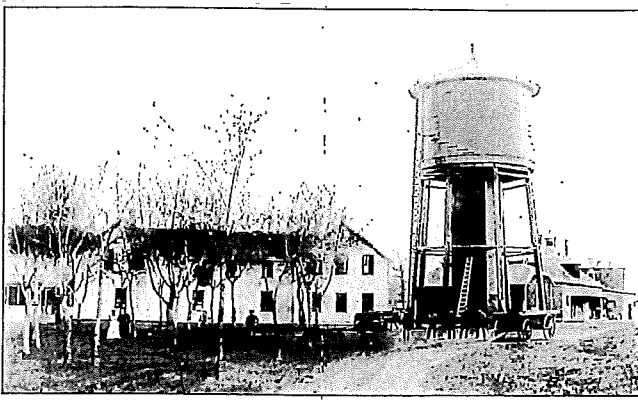
work and cool rooms (the door on the south side of the utility room is a later addition); all windows except the large vertical window in the utility room have inner and outer sashes and when built had three sets of screens and shutters. Hill personally wrote the letter ordering the marble for the floors. The original cedar shingle roof was still on the building in 1992 when it was replaced.

The DeLaval separator and two Boss churns were operated by an overhead shaft and belt drive system (still present) driven by a steam engine. Jersey, Aberdeen Angus and Shorthorn cows in the long cattle barn supplied the milk for butter making.

Ice cut from Pleasant Lake stored in a building on the north side of the dairy (see photo) was loaded into the space between the two cool rooms via a door on the north side. Ice cooled air entered the cool rooms through 12 by 15 inch grilled openings at the floor and ceiling level of the walls adjacent to the ice room. Warm air rose through ceiling vents into the attic and exited through the cupolas. With the restoration of the two cupolas in 1993, Hill's convection operated air conditioning system is intact today!



Walk northward from the dairy (B on the site plan); turn facing south.

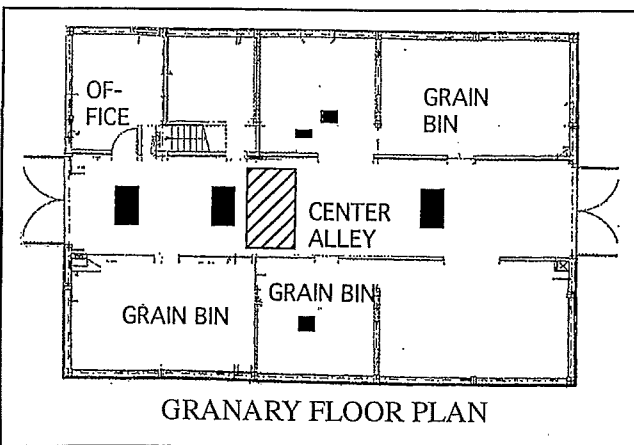


You are viewing a 1905 photo of the buildings on the east side of the 200 foot roadway. (From near to far) the white, wood boarding house for bachelor farm workers, a 50 foot high railroad type water tank, the fronts of the ice house, dairy, and the silo in the cow barn.

When a red barn is not a barn

Look westward to the large red wood sided building referred to as the Red Barn, but actually is a granary and root cellar (C on the site plan).

Hill espoused the advantages of feeding root crops (turnips and rutabagas) to cattle. With only flat land in this area, a root cellar to store the root crops grown on the farm was created by stacking and mortaring field stone and pushing earth against the boulders to create a berm around the building. The cellar was vented vertically by the chimney effect of four wooden ducts extending upward to the two roof ridge cupolas. These louvered cupolas are a sign that this is a granary and not a barn.



Grain grown on the 1,000 acres of cultivated fields was brought by horse and wagon for storage in large 14 foot high bins on each side of the drive-through alley in the first floor of the granary. Wagons may have been hoisted up for dumping using a built in block and tackle pullup located above the alley way.

Approximately seven feet of the entire south side of the loft in the granary was enclosed to contain nesting niches, roosting ledges and food storage bins for pigeons whose access was through the six openings above the south doors.

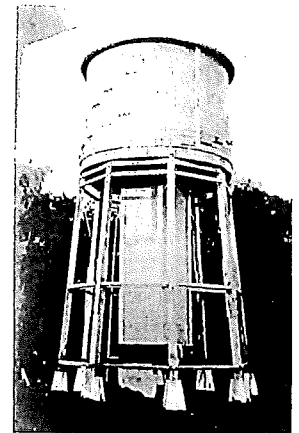
Farm ledgers do not show the purchase of pigeons thus it is assumed these were native birds.

A large opening (cross hatch on the floor plan) in the loft floor over the drive through alley may have provided access to lift bagged feed or other products for storage in the loft.

Access to the root cellar is on the east side of the granary (D on the site plan), By backing a wagon through this doorway, it could be loaded from hatches and chutes (black on floor plan) from the grain bins above.

What's the big pipe for?

Also on the east side of the granary (E on the site plan) is a large pipe protruding from the ground. This was the location of a later water tank whose foundation blocks are in a depression in the hillside towards Pleasant Lake. A pump house was located on this same hillside a little further to the east.

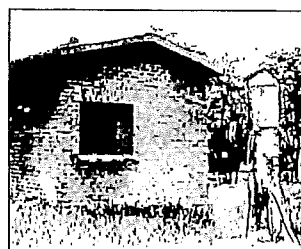


Our friends the bats

Continuing around the north side of the granary, the black boxes on tall poles are bat houses to provide sanctuary for the hundreds of bats who lost their home when the three farm buildings were sealed. It took over 144 tubes of caulk to seal the dairy! As bats consume thousands of mosquitoes, their presence is encouraged.

Oil and gas storage through the years

The small brick building (F on the site plan) is a gas house originally used to store oil for lamps. In later years, it was used for gasoline storage and had a gas pump, with a gasoline filled glass cylinder on top with gallon markers to show how much gas was pumped through the hose.



Horse shoes, wagon wheels and hinges

Continuing to the west, is a one story, red brick building (G on the site plan). A blacksmith shop was in the north half of the building and a machine shop in the south half. Hill's Manitoba Railroad shops provided a locomotive smoke stack for the forge and the coal to heat it. Horse shoes, wagon wheels, and possibly the hinges and hardware for the many buildings were made in the blacksmith and machine shop.

Rings to tie horses are on the inside and outside of the east wall of the blacksmith shop. Vertical bars on the inside of the windows prevented horses from breaking the windows. An overhead axle and belt drive system to run the machines is still present. This is the location of the machine that powered the underground shaft.

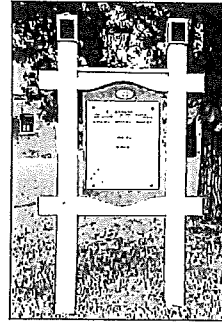
Of the three buildings on the historic site, this is the only one that had been altered. A large garage door was installed in the north wall and the middle wall removed to permit truck storage. Both walls have been replaced as they were originally constructed.

From the ice cooled dairy with the newest milk separation equipment, to the innovative root cellar and underground steam transmission, Hill was constantly on the cutting edge of technology.

Last but not least

End your tour by walking 30 feet east of the entrance to the display panel (H on the site plan). On each side of this display are the names of over 400 North Oaks residents who have and continue to make financial contributions for the restoration and maintenance of the farm buildings and site.

With the exception of the interior of the granary; exterior and interior restoration is complete at all three buildings. Next is the preparation of exhibits to tell the story of North Oaks Farm including its unique relationship to the construction of the Great Northern Railroad from St. Paul to the West Coast, how the blacksmith made wagon wheels, ice was harvested from Pleasant Lake, butter was made in the dairy building, and historic farm machines were used on the farm.



These fabulous buildings with a story to tell are right here in a lovely setting in the North Oaks community for all to enjoy.

We invite you to join the Hill Farm Historical Society and help us realize the full potential of this historical site to present North Oaks Farm's role in history and maintain a park for community activities.

Also, visit our web site at www.hillfarmhistoricalsociety.com

North Oaks Hill Farm Historical Society Annual Membership
Memberships and contributions are tax deductible

_____ Enclosed is \$35 for an Annual Membership
_____ Enclosed is an additional contribution of \$ _____ to assist the Society in its projects.

Name _____
as you wish it to appear on the membership and contributor list

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Please mail completed form and check payable to
North Oaks Hill Farm Historical Society to:
100 Village Center Drive, Suite 240, North Oaks, MN 55127