

Victorian Heritage Database Report
KNOX'S ROCKHILL FARM



Location:

530 NERRENA ROAD, LEONGATHA, SOUTH GIPPSLAND SHIRE

Heritage Status / Level of Significance:

Included in Heritage Overlay

Heritage Overlay Number: HO10

Listing Authority: South Gippsland Shire

Statement of Significance:

What is significant?

The whole of Knox's Rockhill Farm complex including all the buildings designed and constructed by James T Knox in 1926 and the associated land at 530 Nerrena Road, Nerrena.

Why is it significant?

Knox's Rockhill Farm complex at 530 Nerrena Road, Nerrena is of historic, architectural, and technical significance to the State of Victoria.

Historically, although commercially unsuccessful, it was a notable experiment in animal husbandry and milk production and processing techniques that illustrates the importance of dairying to the Shire. It is also historically significant as the short term base of the 13th Light Horse brigade in 1941 at the close of the era of the use of horses for military purposes, and for its association with James T Knox. (AHC criteria - A.4 and D.2)

Aesthetically, it is an extraordinary exercise in the formal design of a farming complex, where the building and functional elements are combined as an architectural composition of form, layout and detail, which is possibly unique in Australia. It is the most intact privately established model farm complex in Victoria. (AHC criteria - B.2 and E.1)

Technically, it is unique for its use of imported mechanised systems for milk production and for its use of concrete block construction in a farm context. Far ahead of its time, the processes and techniques utilised were not immediately adopted, but probably influenced mechanised dairying that was eventually introduced from the 1960s onwards. As one of the few substantially intact complexes of its type, it has significant potential to inform us about this important phase of agricultural development. (AHC criteria - B.2 and F.1)

Description

Knox's Rockhill Farm, built in 1926, is a complex of farm buildings on a hill side in a bend at the south of the Nerrena Road opposite the Chalmer's Hill basalt quarry. It is based on a U-shaped layout, open to the lower side of the site and set on a cut and fill platform in the hillside.

As shown on the attached layout plan, the two projecting wings are single storey, double sided milking sheds for 50 cows each (Buildings 1 & 2). The end of the U was closed by a two storey barn (now collapsed) with silage storage above and a milk production plant below (3). Behind this to the west are a pair of cylindrical concrete block silos carrying shallow water tanks with castellated tops (4). To the north east and slightly in front of the main buildings is a two storey block with a half hipped roof (6), which was the milk & butter factory and a single storey structure to its south with combination hip and gable roofs (5) which appears to have been in part, garages and workshops. Further to the west and south west up the hill are other smaller collapsed structures and at a distance to the south, parallel to the milking sheds, is a piggery (10). To the north of Shed 2 is a large shallow in ground tank.

To the east, roughly projected from the south shed on a lower level is an above ground rectangular tank and in-ground circular tank, with evidence of an open structure extending towards the milking shed.

The walls of all of the rectilinear structures are built of concrete blocks measuring 16in (405mm) long, 8 in. (197 mm) high and 7in. (182mm) thick with a pair of tapered oval holes through their height. The block work is reinforced at the ends of walls and at openings with steel bars slotted through the holes which are then filled with mortar. The horizontal joints are reinforced with galvanised (fencing?) wire. The silos use blocks 305mm long, 165mm high and 160mm thick.

The whole of the ventilation elements, machinery, pen fencing and milking stands have been imported from the Loudon Machinery Company and all bear stamps (stencilled on the sheet metal or cast in the iron elements) giving the patent number and date of the item. The earliest noted were the pen fencing and milking bay elements which are dated 25 July 1916.

The timber frames to all of the openings of the building are rudimentary and not well designed, resulting in deterioration at the sill/jamb junction.

Each surviving element of the group is described in detail as follows.

Buildings 1 and 2 (the milking sheds) These are the milking sheds, oriented east west and separated by a courtyard approximately 15 m wide. Each is about 30m long and 10m wide. The timber roof structure is of basic trussed frames consisting of a bottom chord carried on the outer block work walls and longitudinal beams on two rows of steel columns with timber capital blocks forming an aisle down the centre. The top chord (rafter) is strutted off the column position and collar ties and a short vertical strut at the peak complete the arrangement. The corrugated iron roofing is carried on purlins spanning between the wide spaced rafters. The external gable end is sheeted in batted cement sheet and three large decorative Loudon vents are spaced equally along the ridge. The milking bales are located on either side of the central aisle separated and are by curved pipe rails connecting to a longitudinal frame down the length of the building which carries an unidentified geared rod, cast water bowls with valves which could apparently be operated by the cow and steel yokes for holding the cow in position. A wide longitudinal concrete feed trough is set behind the bale with an access aisle against the external wall. The bale floors are of raised brickwork with longitudinal concrete drains against the central aisle which is apparently of concrete surfaced in a bituminous material thought to include cork to lessen the hardness of the surface. In the external wall at each bale was a patent Loudon window ventilator (Ptd. Feb 8 1918) which held an inward leaning hopper sash in a splayed galvanised iron surround. The side walls of Building 2 have seriously rotated to the south (partly due to their lack of connection to the front wall, but mainly because of failed roof gutters), threatening the stability of the structure.

Building 3 (The barn) This was once a two storey loft structure with a mansard roof sitting on a block work base slightly higher than the adjacent milking sheds. The roof of the milking sheds were extended to meet the mansard and the ground floor plan of Building 3 was a shallow U, containing a series of metal fenced pens. Many of the walls have now collapsed and the loft structure is entirely missing.

Photographs show the mansard roof with a peaked overhang at the ridge covering the lifting beam and wide sliding doors to the loft. This building also had a series of Loudon ridge vents. The whole upper floor was apparently used to store silage, while the lower floor was the production area for the separating, bottling and drying of milk.

Building 4 (The silos) The silos are a pair of cylindrical concrete block structures with castellated tops approximately 5m in diameter and 22 m high located west of the loft building either side of the centre line of the courtyard. They have a series of rectangular openings above one another facing the courtyard and the remnants of lifting mechanisms at the opposite side. They are capped with shallow water tanks and their interior is rendered. Water was pumped from the large in-ground storage tank to the water tanks in the silos from where it was reticulated throughout the complex.

Buildings 5 & 6 (The Milk & Butter Factory) These are separate, to the north east corner and at the bottom of the bank formed by the platform carrying the major elements of the complex. Building 5 is an L shaped single storey structure and is closer to the main complex, tucked into the bank between it and the two storey Building 6. It has combination hip and gable roofs with a north south clear storey vent. A projecting gable to the front containing garage doors appears to have been added. The wide entry doors suggest that it may have been a machinery shed/workshop or garage.

Although Building 6 has no evident external features which identify its function, it is believed to be the milk & butter processing plant. It is of two storeys with a half hipped roof and two unequal dormers to the rear. The external walls have regular window openings and are reinforced with external piers to the first floor level. A concrete platform at the rear bridging from the wall to the earth bank has collapsed.

Building 7 This is a rectangular box above ground level adjacent to an in ground tank at its north side. Various drains and the remains of possibly an open structure supported on block piers are located to its west.

Building 9 This is the large shallow in ground tank north of the milking sheds. It may be the 80,000 gallon temporary water storage tank referred to in the 1989 paper by John Murphy about the complex.

Building 10 This is the piggery, located some 30m to the south of the main complex. This is partially collapsed and contains a number of low block work pens, possibly formerly roofed and a circular storage tank

(understood to be for milk) at the western (upper) end.

Buildings 11 and 12 These are ruined structures located to the west and south west of the complex at a considerable distance. One of the buildings was the residence associated with the complex, while Building 11 may have been a poultry shed.

Originally, the various buildings in the complex were connected by an overhead pulley system.

After the closure of the farm it is believed that this machinery was bought by the Ford Motor company and relocated to one of the Ford factory complexes in Melbourne.

Heritage Study / Consultant	South Gippsland - South Gippsland Heritage Study, David Helms with Trevor Westmore, 2004
Construction Date Range	1926 - 1926
Architect / Designer	
Municipality	SOUTH GIPPSLAND SHIRE
Other names	
Hermes number	30806
Property number	

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