Elevating grader constructing an open ditch in 1909. The average speed of the machine was about 1.3 miles per hour for a 10 hour working day. Station buildings are visible in the background.

Staff members were added in Selvig’s tenure to continue the crops and animal husbandry research. From 1910-1920, most of the grade animals were culled from the herds. The milking strain of Shorthorn cattle was dropped with preference given to the beef type Shorthorns. The dairy herd was improved through use of good sires.

**Drainage Impacts Early Agricultural Research**

Much of the original gifted land obtained from James J. Hill was termed “a duckpond” by local critics, the need for drainage was obvious. The problem was universal in northwestern Minnesota. Funds were justified by the Minnesota State Legislature because if the University could solve that problem, the area farmers would benefit as well from the experience. John T. Stewart, U.S. Department of Agriculture Drainage Engineer, who did the topographical survey stated, “the farm lies in the lowest part of the drainage basin, a good outlet must be constructed.”

A capstan ditch was constructed in 1903 which carried the water in a northwesterly direction to a coulee which was later to become the outlet course of county ditch No. 60. County ditch No. 60 was constructed in 1907 to give the Experiment Station an outlet at the northwest corner of the farm to a depth of seven feet. A more complete system of surface and tile drainage was completed in 1909. The complete project, after 1909, was followed immediately by the first sustained agricultural research work in agronomy, soils, and horticulture as well as in farm crop production to support the livestock.

**Years of Growth**

The Northwest School of Agriculture’s (NWSA) early days could be considered “years of growth.” More staff was added, more buildings were constructed, programs were added, enrollment increased. The first graduating class was in 1909, by 1911 an alumni association was organized. The object was to “bind more closely the graduates who have been closely associated during the school course . . . and to make known to the public the splendid advantages offered by the Northwest School of Agriculture, especially to the young men and women of northwestern Minnesota.”

Thomas M. McCall joined the staff of the Northwest School in 1911 as instructor and station horticulturist. He took a brief sabbatical leave in 1929-30 to return to Iowa State College, Des Moines, to earn his Master of Science degree. Early horticultural plantings had not fared well, most died. After the drainage projects were completed and T.M. McCall took charge of horticulture at the Station, a wide variety of plantings took shape.

By 1913, there were six school buildings. Stephens Hall and Robertson Hall were dormitories; the Sidney M. Owen building was for farm engineering and dairy classes; the