

Kenaston Sask Wheat Pool “A” Steel Grain Elevator

Statement of Significance

Draft December 1 2006



Description of Historic Place

The Saskatchewan Wheat Pool Kenaston “A” Steel Grain Elevator occupies a 0.57 hectare lot on Front Avenue and adjacent to the Canadian National Railway line. The property features a grain elevator constructed of steel circa 1960. Non-contributing structures on the property include a wood crib annex constructed in 1963 and an office constructed in 1978.

Heritage Value

The heritage value of the Kenaston A elevator lies in the form, design and engineering and its status as one of two all steel elevators built using an experimental construction method tested by the Saskatchewan Wheat Pool in 1959-1960. In an experiment to reduce maintenance costs, the Saskatchewan Wheat Pool built only two all steel elevators: the first in Kenaston 1960; and the second in Saskatoon in 1961. Constructed of distinctive corrugated weight-bearing steel panels, the elevator’s innovative design did not need the structural framework that was necessary in most tall buildings. Replaced a 30,000 bushel wood crib elevator constructed in 1916, the building was a prototype that tested the feasibility of all-steel construction. Standing 110 feet tall, the building is approximately five meters taller than wood crib structures but largely resembles the form and design of flat-topped wooden country elevators built in the 1960s. While the elevator and bins are made of steel, the driveway containing the unloading pit is constructed of wood. Its construction demonstrates how grain companies were utilizing new technologies to reduce costs, increase capacities and improve efficiencies to compete with other cooperative and private grain companies during this period of consolidation in the grain trade. The twenty bins in the elevator were fully hoppers, featured an all-steel elevating leg and a steel boot tank-features that were new innovations in grain elevator design in Western Canada. The elevator’s steel construction gives it a unique appearance, sharply differentiating it from the wood crib country elevators which were once common in many prairie communities.

Owing to the expense of all-steel construction, this experimental design was employed only for the Kenaston and Saskatoon elevators. These structures served to inform the construction of another experimental steel elevator many decades later in 1993 in the town of Bruno, Saskatchewan. Of these 1960s steel structures, only the Kenaston elevator was built according to the original plan and stands at full height. Construction required the complex assembly of many number of precision-fit steel panels, and the installation of thousands of bolts and weather sealing washers. Despite difficulties, the Kenaston elevator was completed, but the loss of the experienced foreman during the construction of the Saskatoon elevator led to over-expenditures causing the Saskatoon steel elevator to be built significantly smaller. The steel elevator in Kenaston stands on its original location, is landmark in the community and is one of three elevators that remain of a line of five that stood in the town in the 1960s.

Character Defining Elements

The heritage value of the Saskatchewan Wheat Pool Kenaston “A” Steel Grain Elevator lies in the following character-defining elements:

Elements that reflect the elevator’s innovative form and design and complex construction including:

- The width and length of the structure is narrower than wood crib elevators of similar capacity built at the time
- the use of 676 deep-break corrugated steel panels measuring 12 feet by 4 feet that form the structure's weight-bearing walls. The assembly of these precision-cut panels was complex. They eliminated the need for a structural weight-bearing framework.
- the steel bands that encircle the elevator every 4 feet to secure the steel panels in place
- the 104,000 steel bolts used in assembly that are sealed with a plastic washer to prevent the penetration of moisture
- the substantial steel beams over the work area that measure 36 inches high and extend the width of the structure. These beams were among the heaviest used in construction in Saskatchewan in this era.
- the substructure consisting of concrete beams supported by concrete piles 5 feet in diameter and 15 feet deep
- the light weight of the elevator. This 60,000 bushel structure weighs 335,000 lbs whereas a wood crib elevator of this capacity weighs 670,000 lbs.

Elements that reflect the elevator's specialized grain handling equipment including

- The all steel elevating leg and underground boot tank were new innovations in Western Canadian elevators at the time of construction. The endless-cup conveyor leg that transported grain more than 100 feet from the underground pit to the top of the elevator where an enclosed distributional spout distributes grain into 20 bins. The fully-enclosed distributor reduced dust and is a distinctive feature of more modern elevators.
- Updated equipment added in 1978 reflected the grain companies' drive towards increasing throughput capacity and included: a trackside loading leg and overhead shipping scale, drive shed, dust collector, 57 tonne receiving scale and 70 foot unloading deck and new office.
- Those elements that contribute to the property's landmark status and its significant role in the community, including the location of the elevator, annex and office on their original site on the railway right-of-way.