

## **Horton Water Spheroid**

**3536 46<sup>th</sup> Avenue**



### **Description of the Historic Place**

The Horton Water Spheroid is a tall, bulbous water tower with a narrow base that flares out near the bottom. Built of steel, the tower is 40.2 metres tall with an upper ball 18.9 metres in diameter. It is located in Mountview, one of the highest points in the Red Deer.

### **Heritage Value**

The Horton Water Spheroid is significant for its construction, for its status as a landmark and for its association with the theme of Red Deer's oil-boom development of infrastructure.

Built in 1957 by its namesake, Horton Steel Co., the Horton Water Spheroid is significant for its construction. Unlike traditional water towers which use outward steel legs for support, the spheroid design uses a flared bottom with reinforced concrete piles for support. Forty meters tall with an upper ball nineteen metres in diameter and an eleven metre circular base, the Horton Water Spheroid required 240 tonnes of steel to build, and cost \$275,000. With a capacity of 500,000 imperial gallons, Red Deer's Horton Water Spheroid was the largest spheroid shaped reservoir in the world in 1957.

The Horton Water Spheroid is significant for its landmark status. Known by several nicknames including 'Green Onion', the 'Mushroom', and the 'Water Tower', the Horton Water Spheroid was built on a hill, and is the highest structure in Mountview. When its construction was complete, it was painted Niagara Green, the same colour the company had used for its previous ten projects. With its height and unusual form, the Horton Water Spheroid is a highly visible landmark in Red Deer, and an important part of the city's built environment.

The Horton Water Spheroid is significant for its association with the growth of Red Deer's infrastructure during the oil-boom era. Red Deer's population expanded rapidly during and after the Second World War, which required dramatic improvements in infrastructure. In 1952 the City began planning improvements to its water system, which

was to include the construction of a water tower to help provide adequate water pressure downtown. Typically located on high ground, a water tower uses a pump to force water into the tank, where it is stored. During periods of high water consumption, gravity allowed the water in the tower to complement the pressure of the regular system, thus ensuring an uninterrupted water supply. In 1957 construction began on the Horton Water Spheroid, and in 1958 a bid was accepted from Hornstrom Brothers Construction to build a more than two million gallon underground tank. Combined, the two facilities were projected to serve Red Deer's needs until the city reached a population of 35,000. The Horton Water Spheroid passed its operational test in July of 1958, and was officially opened January 30, 1959. The Horton Water Spheroid is still used as a storage reservoir for Red Deer's water, but it has not been used to create water pressure since the 1970s.

### **Character Defining Elements**

The character defining elements as expressed in the form, massing, and materials of the 1957 Horton Water Spheroid include:

- The spheroid shape of the reservoir and the narrow base that flares at the bottom
- The Niagara Green colour
- The smooth, unadorned exterior
- The steel construction