

# Candle Lake Control Structure Upgrades

Candle Lake, Saskatchewan



**H**ot-dip galvanized steel proved to be the perfect solution for major upgrades to the Candle Lake Control Structure, located at a popular recreational site in Northern Saskatchewan. The structure regulates lake levels and controls discharges into the Torch River, ensuring both environmental stability and public safety.

Built in 1977, the original control structure required extensive upgrades to meet modern standards for operability, maintenance, and operator safety. With public safety in mind, the upgrades were also designed to minimize disruptions to the nearby Provincial Park campground, where visitors often cross the Torch River to access hiking trails and beaches. To avoid interfering with the summer season, the critical construction work was scheduled during the cold northern Saskatchewan winter, from September 2023 to March 2024.

Hot-dip galvanizing was chosen because it checked off many requirements. The durable, long-lasting HDG coating is resistant to bump and abrasion damage—common during the handling of heavy stoplogs and bulkheads—which would cause traditional coatings to chip or peel. Furthermore, it requires no ongoing maintenance, resists vandalism and graffiti, and retains its aesthetic qualities well into the future. Given the structure's high visibility due to its proximity to the campground, preserving its appearance was essential for the long-term success of the project.

Hot-dip galvanizing retains its aesthetic qualities well into the future, which is important given this structure is "in the public eye" due to its proximity to the adjacent Provincial Park campground. ■

**HDG is inherently bump and abrasion resistant. Lifting, moving, and placing heavy stoplogs and bulkheads results in significant wear and tear—damage that would cause most coatings to chip and flake. Not hot-dip galvanizing.**

## Galvanizers

AZZ Galvanizing - Saskatoon

## Engineer

MPE Engineering

## Fabricator

Adam Brad Welding

## Owner

Water Security Agency

## Others

KGS Group  
PCL Construction Management