

WINKLER FIRE HALL MECHANICAL AND ELECTRICAL DESIGN

City of Winkler

Winkler, Manitoba



Project Description

KGS Group completed the mechanical and electrical design for this 32,000 ft², \$4.5 million post-disaster facility in Winkler, Manitoba. One of the largest fire halls in Manitoba, containing six truck bays, a smoke simulation room, hose tower, and fire fighter training provisions, it serves the south Manitoban district. Implementing LEEDTM design strategies, design highlights of the project include:

- High efficiency gas boiler providing heat to fan coils in the offices and an in-floor heating loop in the truck bay.
- Air conditioning for the offices and server room utilizing environmentally-friendly refrigerant.
- Heat recovery ventilators providing efficient ventilation of the offices.
- Wet pipe sprinkler system throughout the facility. Building is equipped with a fully addressable fire alarm detection system.
- Low-flow plumbing fixtures.
- Multi-speed ventilation system for the truck bay controlled by vehicle emission detectors.
- Hose drying system in the hose tower.
- Fully serviced truck bays providing water, truck fill, compressed air, pressure washing, and floor trench flushing capabilities.
- Fire fighters' clothes drying and oxygen tank refilling facilities.
- Diesel generator providing emergency power for the emergency lighting and essential equipment loads.
- Hydro Power Smart energy efficient fluorescent lighting throughout the facility.
- Occupancy-controlled sensor lighting switches for office, washrooms, and service rooms.
- Hydro and communication services designed to allow for future expansions into a fully operational EMO facility.
- Building is equipped with a high-end security system.
- Dark sky compliant exterior building and parking area lighting.