



THE OTTAWA HOSPITAL - EMERGENCY DEPARTMENT AMBULANCE OFFLOAD & MEDICINE TRANSITION UNIT



The HIDI Group provided mechanical design services for The Ottawa Hospital Emergency Department Ambulance Offload and Medicine Transition Unit Facility. Working together with Cumulus Architects on this design build project, the team operated under tight deadline, codes and standard, hospital IPAC requirements and strict COVID-19 regulations to have the four season Insulated 90' x 120' stretched membrane structure up and running for incoming emergency department overflow. Located in the hospital's parking lot the Ambulance Offload and Medicine Transition Unit Facility was developed to assist with patient overflow due to the COVID-19 pandemic. The structure utilizes conditioned corridors for direct access to the main building and access leading from the ambulance drop off.

Mechanical provisions include HVAC system comprising 3 x gas fired unitary air conditioning units equipped with hydronic reheat coils (for temperature and humidity control), electric steam humidifiers, return fans, general exhaust fans (to control tent pressure), sanitary exhaust fan and isolation room exhaust fans. Plumbing system includes water supply and gravity sanitary services connected to existing hospital services, independent electric domestic hot water heating system, and all associated plumbing fixtures. Natural gas sourced from existing hospital service.

Due to limited access to on-site emergency electrical power, the team made careful selections of equipment requiring emergency power and optimized equipment layout to fit within the tight site footprint. Provisions were also taken to include negative pressure isolation room and HEPA filtration on all return and exhaust air streams to prevent the spread of air borne disease.

8 DISCIPLINES
MECHANICAL
ELECTRICAL
PLUMBING
LIGHTING DESIGN
COMMUNICATIONS & AV
SECURITY & RISK
COMMISSIONING
ENERGY SERVICES



LOCATION Ottawa, Canada
CLIENT Cumulus Architects Inc.
OWNER The Ottawa Hospital
ARCHITECT Cumulus Architects Inc.
SIZE 10,800 ft²
CONSTRUCTION VALUE \$5 Million
PROCUREMENT TYPE Design-Build
COMPLETION YEAR 2021
MARKET SECTOR Healthcare