# Brian Holmes P,Eng. RCDD CD

Senior Consultant – Project Manager





#### Education

Professional Engineers of Ontario -Licenced Professional Engineer (P.Eng.) 2007

Certified Engineering Technologist (C.E.T), Ontario Association of Certified Engineering Technicians and Technologists (OACETT), 1993

Registered Communications Distribution Designer (RCDD), Building Industry Consulting Services International (BICSI), 2005

Electrical Engineering, Communications Diploma, Ryerson Polytechnical Institute, 1990

### **Employment History**

2020 to date: Fancom Communications Engineering - Senior Consultant

2020 to date: B. Holmes and Associates Ltd. - Principal

2014 - 2020: PTS Consulting Canada Ltd - Senior Consultant/Director

1997 - 2014: IBI Group - Associate

1977-1994, 2018 to Date - Canadian Armed Forces, Royal Canadian Navy and Cadet Organization Administration and Training Service

# **Professional Associations/ Memberships**

Association of Professional Engineers Ontario – PEO

**Building Industry Consulting Services** International (BICSI)

The Ontario Association of Certified Engineering Technicians and Technologists (OACETT)

# **Qualifications and Expertise**

Brian is an accomplished Engineer and Senior Technology Professional with a proven track record in the design, construction and assessment of telecommunications networks and world-class data centres. Brian's experience with telecommunications, electronic security and control systems covers a wide array of industry verticals including hyperscale data centres, critical facilities, rural broadband/FTTH, education, financial services, defense, nuclear power, transportation and transit, land mobile radio and broadband wireless systems.

As a licensed Professional Engineer and BICSI certified Registered Communications Distribution Designer (RCDD), Brian has designed flexible and scalable information transport systems that add value to end-users to leverage their infrastructure assets, contributing to a positive return on investment. Brian has designed and managed projects for owners as diverse as Microsoft, Salesforce, BMO, HSBC, Ministry of Transportation-Ontario, Defence Construction Canada, Toronto Transit Commission and many others.

## **Professional Experience**

## Security

- OPG Pickering Nuclear Power Station perimeter fence upgrade project
   Thunder Bay Provincial Courthouse Acted as the PDC (Program Design and Compliance) Consultant on behalf of the Owner, Ministry of the Attorney General. Areas of responsibility included providing all of the project functional and technical specification, blocking systems diagrams and review and oversight of the DBC (Design-Build Contractor). Systems included video surveillance, video remand, duress, intercom systems, telecom, courtroom AV and vulnerable witness testimony rooms.

#### Government

- Parliament of Canada Assisted the Long-Term Architectural Planning office in the development of a modern CCTV/CATV system that could be used to provide a full range of broadcast and targeted audio and video programing to be distributed within the Parliamentary Precinct. Work included audit and survey work, needs assessment application to Industry Canada for permission to use CATV channels within the aeronautical navigation radio band.
- Department of National Defence of Canada, Aerospace Engineering Test Establishment- Cold Lake, Alberta. Developed the design for a new structured cable system for the admin offices and hanger. Also designed a remote/outdoor GPS
- antenna system used to bring GPS signals into a special aircraft test hanger.

  Ministry of Transportation Ontario COMPASS East Traffic Operations Centre. Provided full design and CA of the traffic operations systems that were being relocated into a new Traffic Operations Centre in Ottawa. This TOC is responsible to monitor and manage all of the Provincial roads within the Eastern Ontario Zone including the Boarder approaches to the USA.

- University of Toronto Mississauga Bio Labs renovation project.
  York Region District School Board Security Consultant Project. Security audit, report, recommendations design, specification and construction admin of board-wide video surveillance system.
- Centennial College HP Science and Technology Centre Telecom, wired and wireless data networks, campus AV and 'smart" Classroom technologies.

### **Municipal/Intelligent Transportation Systems**

- York Region Transit VIVA Next design and construction admin of the Regional Fiber Optic backbone along with the platform system including CCTV surveillance fully integrated with the VoIP emergency duress phone systems, revenue management systems, next bus arrival sign system and finally the award-winning zoned and highly
- intelligible IP Based platform paging system.
   CDTA (Capitol District Transit Authority), Albany, NY Full design and construction admin of the regional fiber and wireless networks to support a rollout of a regional Bus rapid transit system. Project included integration with the City of Albany Police services to back-haul intersection camera video and to allow communications with the Econolite Traffic Signal Controllers.
- TTC (Toronto Transit Commission) CAD/AVL Way Forward project. This project analyzed the existing in-house Computer Aided Dispatch and Automatic Vehicle Location system which was designed in the mid-1970s and deployed in the early 1980s. The focus of the project was to identify key features, functions, existing processes and workflows and then identify existing commercial CAD/AVL offerings that would meet the needs their needs then to assist to procure, and commission the new CAD/AVL platform across the entire enterprise and fleet of vehicles. This included a wholesale replacement of the existing land mobile radio system with a new TETRA based digital land mobile radio system across the fleet.