RPM ENGINEERING
TELECOMM ENGINEERING SOLUTIONS

Robert P. McCann, RCDD

Registration
Registered Communications Distribution Designer (RCDD)

Professional Affiliation
Building Industry Consulting Services International (BICSI)

Education
AD Specialized Technology
ITT Technical Institute

Certifications
Siemon Design Engineer
CommScope Design Engineer
Ortronics Design Engineer
Mohawk Design Engineer
Belden Design Engineer
Chatsworth Grounding and Bonding

Relevant project experience:

College/University Facilities

Simmons College, Auditorium Complex
Boston, MA
Renovations to the electrical and tel/data infrastructure to convert the Auditorium and adjacent spaces on the 3rd floor of Simmons Hall in to a Conference Center. The project will include breakout meeting space in the adjacent classroom space, a control booth for lighting and sound control, and a catering kitchen.

Harvard University, 888 Memorial Drive
Cambridge, MA
Telecommunications engineering services for a new 120,000 SF 7-story low-rise building for graduate student housing with 210 units including a new two-level 60,000 SF underground garage for 120 cars. Harvard University, Radcliffe Dormitory Complex Cambridge, MA

Design of a telecommunications/communications infrastructure for renovations to the Radcliffe Dormitory Complex, which is approximately 57,200 SF in size. Passive components for voice, data, and video cabling were designed which comply with industry standards and Harvard University standards.

Emmanuel College, New Student Recreation Center
Boston, MA
Design for a new student recreation center to include an atrium, student meeting rooms, a food court, recreational and fitness spaces, a 1200 person gymnasium, and a boiler plant. Services included normal and emergency power systems, security systems, and data communication systems.

Worcester State College, New Residence Hall
Worcester, MA
Telecommunications design for a new 344 student, 106,500 SF residence hall. The project includes suites and apartment style living quarters, each unit with common rooms, kitchens, bedrooms and bathrooms. The new Residence Hall will also include a Resident Director's apartment, laundry, convenience shop, student lounges, and multi-purpose room.

Westfield State College, New Residence Hall
Westfield, MA
Telecommunications design for a new 119,500 SF residence hall containing 78 apartment style units each with a common room, kitchen, bedrooms and bathroom. The new Residence Hall will also include a Resident Director's apartment, mailroom, laundry area, convenience shop, lounge, student activity areas, and facility management space.

North Shore Community College, New Academic Building
Danvers, MA
Telecommunications and security system design within this new 100,000 SF academic building containing classrooms, library, a gymnasium and cafeteria.

Yale University, Congress Avenue Building
New Haven, CT
Design of a telecommunications/communications infrastructure for the new 8-story, 450,000 SF Research and Teaching facility with 136,600 SF of wet-bench laboratory, lab-support and research-office space. The building's core facilities include genomics/magnetic imaging and a state-of-the-art 140-seat auditorium.

RPM ENGINEERING
TELECOMM ENGINEERING SOLUTIONS

Robert P. McCann, RCDD

Hospitality/Casino Gaming and Residential Facilities

Newport Grand
Newport, RI
Renovations to the existing casino included complete telecommunications cable infrastructure design incorporating four separate networks, Also the upgrade of existing security system encompassing new card access, intrusion detection and complete security surveillance system. Construction management services were also provided on the project this service saved the owner over 10% of original construction bids of the total telecommunication and security installations.

Mandarin Oriental Hotel & Residences, Boylston Street
Boston, MA
Preliminary investigative services of the communications systems for the construction of a new, high-end, mixed use facility to include offices, residential, hotel, and retail components. A study and conceptual designs were performed to determine the best available options for the communication technologies system components of the building.

Westin Hotel & Residences
Providence, RI
Survey of existing hotel and telecommunications cable infrastructure design for the addition of a 32 story high rise combination hotel and luxury residences, the addition included 200 hotel rooms and 42 luxury residences, with five parking levels. All tel/data and security infrastructure systems were integrated with existing hotel systems. This project required extensive services provider coordination.

Harrison Avenue Residential Complex
Boston, MA
Telecommunications design of a new 150,000 SF residential complex containing 130 units in one 8-story building and 28,000 SF of below grade parking on 3-levels. Design included a complete voice/data/video cable infrastructure and an intercom system with video surveillance capabilities.

O'Callaghan Hotel
Boston, MA
Telecommunications and design services for the renovation of the existing 80,000 SF high rise building at One Court Street. The existing MEP/FP systems will be removed and the building will be converted from an office tower to a 140-room hotel.

Industrial Facilities

CYTYC Redundant Manufacturing
Londonderry, NH
Renovations to the existing facility to accommodate new office/manufacturing space. Upgrades were performed on various open and enclosed offices, conference rooms, data room, mixing rooms, manufacturing rooms and a QC lab. Tel/data work included backbone and horizontal voice and data passive cabling infrastructure design and the build-out of a new telecommunications room.

The Gillette Company, 3E, 5C, 5D, 6C and 6D
South Boston, MA
Telecommunications systems renovation of the existing shop and office areas into new office space. Services include extension and modification to existing base building systems.

The Gillette Company, 3K/3B Building Concept Learning Center
South Boston, MA
Design for the Brand Training and Learning Area in Building 3K/3B consisting of approximately 10,000 SF and 4,500 SF of space. Tel/data included backbone and horizontal voice and data passive cabling infrastructure design, and modifications to the Telecommunications Room.

The Gillette Company, L-Building and 1E/1F Renovation
Boston, MA
Renovations to the L-Building into new machine shop areas and to relocate Blade Sharpening and Molding operations to 1E/1F. Tel/data included backbone and horizontal voice and data passive cabling infrastructure design, and modifications to the Telecommunications Room.

PegaSystems, 101 Main Street
Cambridge, MA
Engineering services for an evaluation of the main Data Center within the 101 Main Street facility. The evaluation was performed in 2-phases: Phase 1 focusing on MEP systems, and Phase 2 focusing on future planning requirements for the required Tel/Data services, all to be designed with maximum flexibility.

RPM ENGINEERING
TELECOMM ENGINEERING SOLUTIONS

Robert P. McCann, RCDD

Commercial Facilities

Blue Cross/Blue Shield
Hingham, MA
Communication technologies and security engineering services for the development of the office facility. Services included the design of the site, shell and core and office fit-out of approximately 300,000 SF and a 500,000 SF open-air garage. Space includes a 12,000 SF Data Center, full service kitchen/cafeteria, training center, conference center, daycare facility and fitness center.

Blue Cross/Blue Shield
Providence, RI
Design, Project management and Construction management of a 15 story, 300,000 SF office facility that included voice/data/video cable infrastructure installation. The design included category 6 cabling and supporting pathways for multimode and singlemode fiber optic backbone, Data Center design and layout, Main Distribution Frame layout, Independent Distribution Frame layouts (13 IDF'S), power and cooling coordination for all communications rooms. The coordination included security, building management and audiovisual systems.

Blue Cross/Blue Shield
Quincy, MA
The complete technology fitout of a 343,000 SF office facility that includes the design of a state of the art, voice/data/video/fiberoptic network. The design included category 6 cabling and pathways, multimode and singlemode fiber optic backbone, Main Distribution Frame layout, Independent Distribution Frame layouts (14 IDF'S), power and cooling coordination for all communications rooms. The coordination included power and cooling for the, ductbank design at each of the sites and construction administration. The security design of a 340,000 SF office to include Card Access connected to an enterprise security management network, integrated CCTV with full monitoring capabilities in multiple geographically diverse locations, Intercom and Radio Frequency Identification for a 1800 car parking facility. Coordination of conduit, power and cooling for each device and the Command Center.

Gillette Stadium, Administration Level
Foxboro, MA
Renovations to Gillette Stadium office space including various conference rooms and a high-end executive area.

Gillette Stadium, Luxury Boxes
Foxboro, MA
Renovations to the Luxury Boxes at Gillette Stadium. Upgrades consisted of tel/data design to fit-out 8-luxury boxes and the expansion of the roof deck.

Gillette Stadium, Patriot Place
Foxboro, MA
Design of a cable infrastructure pathway system for service provider feeds into retail shops, hotel, and the museum.

Goulston & Storrs, LLP, 50 Rowes Wharf
Boston, MA
Renovations to 45,460 SF of "Class A" law office space located on the 7th floor. Telecommunications design was provided within the office areas, high-end conference rooms and new lobby area.

Leverett A. Saltonstall Building, 100 Cambridge Street
Boston, MA
Tenant improvements to 254,400 SF of state office space. Telecommunications design included voice and data cable infrastructure, and a fiber optic backbone, sized to meet each agency's requirements, to allow the agencies to connect to the State's WAN.

Bingham McCutchen LLP, Law Office Renovation, 150 Federal Street
Boston, MA
Renovations to over 12,000 SF of "Class A" space on the 28th floor, and over 10,000 SF of additional space on other Bingham floors. The entire 28th floor was completely demolished and all new systems installed. Additionally, three-new conferencing facilities were constructed within the space.

Nixon Peabody LLP, Law Firm Renovation, 100 Summer Street
Boston, MA
Renovations to over 167,000 SF of "Class A" space on 5 floors containing a number of facilities requiring specialized building systems, with an entire floor devoted to high-end, technologically advanced conference facilities. Design included voice/data components for the entire space, and the build-out of a new head end room, telecommunication rooms, and a main computer/data room.

Fidelity Investments, On-Call Telecommunications Services
Northeast Region
A spectrum of specialized design services involving projects of varying size, sequence, scope and complexity, including new telecommunications cabling designs for the tenant fit-up of Fidelity's operations. Areas included dense pack call centers, trading floors, outside plant services and typical open/enclosed office spaces, and LAN/LAB/PTR/FTR/Data Center and OSP rooms.

IBM, On-Call Engineering Services
Northeast Region
On-Call engineering services for various tenant fit-out and new construction projects including communication design for various projects ranging in size and scope. Spaces include open and closed offices, training rooms, data rooms and general support spaces.

IBM, Communications Systems Cabling Design, One Main Street
Cambridge, MA
Project Manager for the tenant fit-out of office space located on two floors including voice/data secure horizontal cabling design, telecommunications rooms layout and backbone design. The space was designed to minimize any down time and disruption to the existing network.

LEXIS - NEXIS, 10 Milk Street
Boston, MA
Project Manager for renovations to 28,000 SF of office space for a data collection firm located on two floors, including the fit-out of a computer room. Work included cabling infrastructure design and head end room design.

Inter Ops, Inc., Mystic Center Office Building
Medford, MA
Project Manager for the fit-out of 10,000 SF of tenant space on one floor. Design included voice and data communication systems within the Interim NOC and TC Rooms, office areas, permanent NOC/Command Center, and the telecommunications room.

Context Integration, Phase One Passive Infrastructure, 343 Congress Street
Boston, MA
Project Manager for the fit-out of 45,000 SF of tenant space on two floors. Design included voice and data communication systems for office areas and the telecommunications room.

Giganet,
Bolton, MA
Project Manager for improvements to 50,000 SF of office space located on 2½ floors. Design services were provided for voice and data communication systems.

Disney Quest, Disney Worldwide Services, Chicago IL
Design for the construction of a new 90,000 SF interactive theme park which incorporates a zoned distribution system utilizing a hierarchal star topology to facilitate cable plant management. The scope included design/consultation for security, point of sale, access monitor, card strike, access control, telecommunications, and data network design.

Cengage
Boston, MA

Project Manager and Construction manager for the tenant fit-out of 100,000 square foot office space located on three floors including voice/data/video cabling design. Telecommunication room design and layout consisted of an MDF and two IDF's interconnected by copper and fiber optic backbone cabling design. Also included in the design was a complete audio visual design consisting of overhead projectors, LCD display panels with video conferencing capabilities. The entire project was designed and construction completed within 90 days.

Educational Facilities

St. Mark's School, New Performing Arts Center
Southborough, MA
Design of a telecommunications/communications infrastructure for the construction of a new 17,500 SF performing arts facility with a 500-seat auditorium/concert hall, control booth, lobby, box office, visual arts area, practice rooms, and offices.

Nativity Preparatory School, Jamaica Plain, MA
Design of a telecommunications/communications infrastructure for the complete renovation/conversion of a 24,000 SF, two-story commercial building to classrooms, offices, gymnasium/auditorium, cafetorium, warming kitchen (with the ability to become a full serving kitchen), locker rooms, faculty and student restroom facilities, and support spaces.

RPM ENGINEERING
TELECOMM ENGINEERING SOLUTIONS

Robert P. McCann, RCDD

North High School
Worcester, MA
Design of a telecommunications/communications infrastructure within the new 200,000 SF High School. The horizontal data distribution design included components from the work area outlet to the patch panels in the Telecommunications Room including provisions for pathways and spaces and interdisciplinary coordination. A zoned PA system was also designed to serve the entire facility.

Chelmsford, MA Public Schools, Existing Conditions Study in 3 Schools
Survey and preliminary schematics of the telecommunication systems in two middle schools and one high school.

Hosmer Elementary School
Watertown, MA
Design of a telecommunications/communications infrastructure for renovations and a new 12,000 SF addition to the school. The scope of services included voice/data infrastructure for a high-speed fiber optic backbone design.

Academy Avenue Elementary School
Weymouth, MA
Design of a telecommunications/communications infrastructure for renovations to the school. Work included two floors of voice and data system upgrades within approximately 38,600 SF, and the design of data communication systems within the entire usable floor space of the school.

Blackstone Valley Regional Technical High School
Upton, MA
Design of a telecommunications/communications infrastructure for the renovation and new addition to the 274,974 SF, 3-story school. Design included a complete system of raceways for all power, communication and signal conductors, and wire and cable for all power and grounding. An empty conduit system for tele/video/data cabling and a complete intercom system was also provided.

Medfield High School
Medfield, MA
Design of a telecommunications/communications infrastructure for the 105,000 SF renovation and new 95,000 SF addition. Services included voice/data/video, master clock, and intercom paging system, including passive components. The project design considered future programs and facility needs for use of technology both between and within the schools.

Medway High School
Medway, MA
Design of a telecommunications/communications infrastructure for the construction of a new 200,000 SF school including design within the computer classrooms, 600 seat auditorium, library, and offices. Voice/data/video, master clock, and intercom paging system along with conduit and boxes for a security system was included.

Boston Public Schools, Technology Upgrade Phase I & II
Boston, MA
Design services for this fast-track utility and electrical upgrade project for forty public elementary, middle, and high schools. The project included power distribution, voice/data/video network design and integrated paging systems within each school building that ranged from 60,000 SF to 200,000 SF.

Boston Public Schools, Technology Upgrade Phase III
Boston, MA
Design services for this fast-track utility and electrical upgrade project for eighteen public middle and high schools. The project included power distribution, voice/data/video network design and integrated paging systems for each school that ranged from 80,000 SF to 200,000 SF.

RPM ENGINEERING
TELECOMM ENGINEERING SOLUTIONS

Robert P. McCann, RCDD

Transportation Facilities

United Airlines, Dulles International Airport
Chantilly, VA
Telecommunications design for the installation of a new BullsEye Scanner at the airport, including fiber cabling for the Main Terminal, T Gates, A Concourse, C/D Concourse, and MU-2 Building; Cat 5 cabling for the antennas at the gate areas and bag rooms; new antenna mounts; and additional racks for communication rooms.

United Airlines, Logan International Airport,
Boston, MA
Telecommunications engineering services for the development of fiber construction documents to accommodate UAL's Single Podium Project at Logan Airport, including fiber cabling and raceway design. The fiber optic cabling will also be used for future UAL's applications and tie into other types of systems, such as security.

United Airlines, Philadelphia International Airport
Philadelphia, PA
Telecommunications engineering services for the development of fiber construction documents to accommodate UAL's Curbside Check-In Project at Philadelphia Airport, including fiber cabling and raceway design. The fiber optic cabling will also be used for future UAL's applications and tie into other types of systems, such as security.

United Airlines, LaGuardia Airport
New York, NY
Telecommunications engineering services for the development of fiber construction documents to accommodate the installation of 24 strands of fiber-optic cable between UAL's MDF 1 and IDF 2 areas. The fiber optic cabling will also be used for future UAL's applications and tie into other types of systems, such as security.

Health Care Facilities

Covidien
Bedford, MA
Design of a telecommunications/communications infrastructure for the construction of a renovated 70,000 SF general office space and R&D Laboratory for Bio and Sports surgery patience.

Covidien Building One,
Mansfield, MA
Design of a telecommunications/communications infrastructure for the complete renovation of a 120,000 SF, two-story commercial building to accommodate R&D Labs, general office space, warehouse and support spaces.

Covidien Building Two,
Mansfield, MA
Design of a telecommunications/communications infrastructure for the renovation of a 66,000 SF, three-story commercial building to accommodate customer service and general office space.

Covidien Building Five,
Mansfield, MA
Design of a telecommunications/communications infrastructure for the complete renovation of a 100,000 SF, two-story commercial building to accommodate R&D Labs, general office space, warehouse and support spaces