ATTACHMENT 4

TO

APPLICATION OF

CHRISTOPHER B. BURKE ENGINEERING, LTD.

TECHNICAL LICENSING REQUIREMENTS

AND

RESUME OF JOHN CARUSO, PE

John Caruso, PE
Head, Mechanical/Electrical Department
Christopher B. Burke Engineering, Ltd.

PROFESSIONAL EXPERIENCE:
Christopher B. Burke Engineering, Ltd.
June, 1988 to Present (25 years)

EDUCATION
Bachelor of Science, 1988
Mechanical Engineering
University of Illinois at Chicago

PROFESSIONAL REGISTRATION
Professional Engineer, IL, 062048356, 1993
Professional Engineer, IN, PE11012145, 2010

PROFESSIONAL DEVELOPMENT
Ethics in City Government, Ethics Training for CDA/OMP Contractors, Vendors & Employees

PROFESSIONAL AFFILIATIONS
American Society of Mechanical Engineers
Engineers Without Borders
Illuminating Engineers Society

SUMMARY OF QUALIFICATIONS:

Professional Engineer with 25 years of experience in design of mechanical/electrical engineering projects. Experience includes design of electrical systems, pump stations, water model studies, roadway and site lighting, SCADA and irrigation systems. Participated and/or acted as Resident Engineer on numerous projects involving potable water and sewage related pumping stations, roadway lighting and storm water management. Responsibilities include design coordination with all related engineering disciplines on projects with an emphasis on electrical and pumping applications including storm, sewage and potable water pump stations, as well as roadway lighting and electrical design. Duties include preparation of design memorandum and preliminary engineering reports; acquisition of permits from state, county, and local agencies; preparation of contract specifications and construction plans; review of drawings and specifications for code compliance; providing resident engineer services; design of standby engine generators and electric services; coordinating the procurement of electric service with local utility providers, including ComEd, Vectren, NIPSCO, Naperville, as well as individual municipalities such as St. Charles, Geneva, Winnetka. Design of lighting systems for roadway, parking lot, landscape, and interior applications; and design of SCADA systems for sanitary, storm and potable water applications.

ELECTRICAL DESIGN RESPONSIBILITIES AND EXPERIENCE:

PUMP STATION DESIGN - Design and preparation of construction plans and specifications for sewage, storm and potable water pumping stations ranging from 0.5 cfs sewage ejector stations to 500 cfs storm water pump stations. Coordination of electrical services ranging from 100 amp to 2000 amp, 480 volt, three phase, 4 wire. Incorporate energy efficient, variable frequency drives (VFDs) and SCADA controls to reduce energy consumption. Coordination of electric service with local utilities.

BUILDING ELECTRIC SERVICE DESIGN - Design and coordination of building electrical services ranging from 100 amp to 2000 amp, 480 volt, three phase, 4 wire; motor control centers, switchboards, main distribution panels, lighting panels, pump control panels, current transformer (CT) cabinet transformers, etc. Coordination with and complete applications for electric service from local utility providers. Electric service and distribution design for motors ranging from 1 Hp to 300 Hp including TENV to submersible type motors.

ENGINE GENERATOR DESIGN - Design and coordination with local electrical utility providers for engine generators ranging from 25 kW to 1000 kW including diesel and natural gas fueled; automatic transfer switches, base fuel tanks, inside applications and exterior sound attenuated/weatherproof enclosures. Design of automatic transfer switches to switch from local utility to engine generator upon loss of power.

ROADWAY AND SITE LIGHTING DESIGN - Design of lighting systems for private, municipal, IDOT, ISTHA roadways, parking lots, athletic fields and recreational facilities including photometric analyses. Designs include traditional HID lighting as well as energy efficient LED, LEP and induction type light sources. Coordinate with local utility to provide electrical service connections, transformers, switchgear, etc.

ROADWAY LIGHTING DESIGN PROJECTS

Prestbury Citizens Association, Sugar Grove: Replacement of roadway lighting units throughout residential subdivision. Coordination with ComEd for street lighting connections and billing. $600,000 (2007-13)

Uptown Redevelopment, Park Ridge: Project Manager for $1.5 million roadway lighting project near Northwest Highway and Touhy Avenue. Project included both City and IDOT roadways. Roadway lighting submittals and permit applications were submitted to IDOT for approval. Coordination with 7 intersections including traffic signal replacement at all intersections. Electrical included tree lighting, electrical feeds for kiosks and convenience receptacles. (2008-12)

88th Avenue Street Lighting Design, Palos Hills: Project Manager / Resident Engineer for 1 mile of roadway lighting design using ornamental type street lighting. Construction cost $700,000. Project was redesigned using standard cobra head type luminaries and spun aluminum poles. (2004)

Balmoral Avenue Extension, Rosemont: Design of $600,000 roadway lighting improvements for the extension of Balmoral Avenue in Rosemont. Incorporated the use of over 140 lighting units in the design of multiple lighting systems. The project's close proximity to O'Hare Airport restricted overall mounting height to 17'-0". Temporary lighting was installed on Mannheim Road for construction operations. Other entities of the project consisted of bridge lighting mounted to parapet walls, underpass lighting, and upgrades to existing Village, City of Chicago and IDOT lighting systems. Construction cost $10 million. (2003)

Randall Road Intersection/Transition Lighting, McHenry County Highway Department: Design of lighting at 4 intersections in McHenry County using 61 light poles and 3 new lighting controllers. Upgraded existing lighting controllers and expanded the system. Incorporated existing luminaries on combination lighting/traffic signal poles into new lighting system. (2003-4)

DuPage Technology Park-Phase I, West Chicago: Designed lighting at a technology park in West Chicago using forty-two 40ft. light poles and 2 lighting controllers which illuminated approximately 4400ft. of roadway including 2 roundabouts. Also aerated 7 ponds using air compressors and diffusers regulated by 2 aeration electric controllers. Duties included photometric design, plan design, and cost estimate. (2006)

SITE LIGHTING DESIGN PROJECTS

DuPage County Courtyard, Wheaton: Project Manager for the installation of 11 ornamental roadway light poles, 35 ornamental walkway light poles, 8 ornamental parking lot light poles and a remote receptacle for events. Existing electrical panels were upgraded to accommodate new lighting. Designed a site irrigation system including a submersible pump drawing water from an adjacent pond via a concrete structure. $500,000 (2004-5)

Prairie Crossing Site Lighting, Metra: Project Manager for the installation of 80 ornamental parking lot lighting standards in which 15 were located on a train platform deck. Tasks included photometric design and preparation of plans. (2004)

RECREATIONAL FACILITIES PROJECTS

Lincoln Park Zoo South Pond Renovation, Chicago: This project consisted of draining/dredging the existing pond and removing/replacing/upgrading all adjacent amenities, improvements including lighted boardwalk and path around pond, 2 waterside pavilions with lighting, electric and communication ports, ticket and toilet kiosks, receptacles throughout, a wind turbine, central electrical controller, pond aeration and an automated pond water refill system water main. (2010)

Concession/Washroom Building, St. Charles Park District: Designed a 2,100 sf restroom and concession building for the Park District. Amenities included 3" water service from existing water well for domestic supply and fire protection, 480 volt electrical service, grinder sewage lift station and 1,200 feet of 2" force main, restrooms, concessions storage and picnic area. (2012)

East Side Sports Complex, St. Charles Park District: Designed site lighting and softball field lighting for the East Side Sports Complex in St. Charles; including two 1200 amp electrical systems for two cartwheel style quad softball fields, 2 soccer fields, tennis, basketball, skate park, and parking lot. Also, included in the scope of work was the site electrical for providing a shallow (300 ft.) well to the site and irrigation system, and maintenance of the building's electrical systems. (2007-2013)

Veteran's Memorial Park, Glendale Heights: Project Manager for the design of park lighting including 12 ornamental poles with receptacles, 11 recessed wall lights, 5 ingrade monument lights, 2 sign flood lights, 2 flag floodlights, and 4 low voltage ingrade lights for a 48" rotating granite ball. Also, there were 6 remote quad GFI receptacles and provisions for connecting portable power receptacles for events. Duties included photometric calculations, plan design and preparation, and cost estimate. (2004)

RESIDENT ENGINEERING PROJECTS

DMS Replacement, ISTHA: Replacement of 5 dynamic message signs for Tollway including LED DMS signs, CCTV camera installation, fiber optic cable communications, and digital communications network equipment. Construction cost $1.1 million. (2008)

MISCELLANEOUS PROJECTS

Flood Mitigation Project, Elmwood Park: Design of 150 cfs storm water pump station including four 250 Hp electric submersible pumps, 1000 kW diesel engine generator, 1600 amp electric service and motor control center. Coordination with ComEd to furnish 1600 amp, 480 volt, 3 phase electric service to site. $3.6 million (2013)

Terrace View Pond Pump Station, Lombard: Design of storm water pump station and pond improvements to dewater existing detention pond to create 13 acre-feet of flood storage. Design included 2 cfs pump station and pond aeration system. Coordination with ComEd to provide 480 volt, 3 phase electrical service to site for pump station. $1.1 million (2012-13)

Review of Electrical, Mechanical, Plumbing and Fire Protection Drawings: Review of electrical, mechanical, plumbing and fire protection contract drawings for code compliance for commercial/office/hotel developments in the Villages of Rosemont, Chicago Ridge, Elmwood Park, Willowbrook, Darien, Wayne and City of Rolling Meadows. (Ongoing)