

STEVEN G. SCHWERD
PROJECT HISTORY SAMPLING

SOLAR

▪ **General Overview**

Started and developed a full service engineering team that successfully completed projects ranging from small scale distributed generation to large scale utility projects, consisting of rooftop, carport, ground mount and post up systems, across 25 states and many different utility companies. Projects encompassed many facility types – industrial, educational, institutional, corporate, retail, municipal, residential, etc. Familiar with and actively participated in cradle to grave services including feasibility and due diligence, conceptual PV designs, energy load usage estimates, energy production estimates, board approvals, interconnection applications, construction documents, permitting, construction administration and project management, independent engineering review, commissioning and operational support. Actively involved with industry leading vendors, particularly the major inverter and rack system manufacturers. Have an extensive knowledge of wind calculations and effects and structural analyses and factors for rooftop systems – ballasted, fastened, and penetrating. Stay involved and aware of federal and state programs, utility variations, industry trends and such non-technical issues to provide value and advice to customers and develop the best direction and vision for firm. Client types have included capital energy companies, solar developers, solar integrators, EPCs, natural resource companies, end users, public entities, Architects and Engineers.

▪ **Somerset County Improvement Authority, Somerset County, NJ**

Principal and Client Manager in charge of the Solar design team for this 37 site, 9.1MW total county improvement project across the county of Somerset. Services included the Structural Engineering for rooftop analyses and reinforcement designs, Electrical Engineering, and permit expediting. Planned and organized all interior and subconsultant resources within a week of advisement of project in order to schedule field survey resources and engineering and production and coordination in order to meet challenging deadlines, with excellent results achieved.

▪ **Best Buy and US Foods, Perth Amboy, NJ**

Principal and Client Manager in charge of the Solar design team for 2 adjacent industrial warehouse roof top ballasted systems each totaling 4MW. Services included Full Service Engineering including, Electrical, Survey, Environmental, and Structural. Performed extensive studies on various wind calculations, different methods of panel racking - ballasted and tie down, as well as feasibility studies. Directed team on the conceptual medium voltage design for the single interconnection and distribution to both buildings.

▪ **Sussex County Improvement Authority, Sussex, NJ**

Principal and Client Manager in charge of the design team for the 24 Site 6.8MW total project across various Sussex County sites. Services included, PV Design plus Full Service Engineering including Civil, Survey, GeoTech, Environmental, Structural and Electrical.

▪ **Mercer County Community College, West Windsor, NJ**

Principal and Client Manager in charge of the design team for this 8.5MW ground mount solar array that is believed to be the largest solar installation for a higher education facility in North America. Services included, PV Design plus Full Service Engineering including Civil, Survey, GeoTech, Environmental, Structural and Electrical Engineering.

▪ **Delaware Electric Cooperative, PV Plant, Georgetown, DE**

Principal and Client Manager for this 5MW utility scale ground mount solar array prepared for Sun Edison. Services included Electrical Engineering, GeoTech and Structural review.

WORKPLACE

- **Bank of NY Mellon, One Wall St., Manhattan, NY**
Renovation of the entire 12th floor of this hi-rise building. Project is seeking to be the first LEED certified for commercial interiors for BoNY Mellon. Performed the initial interface with client, team and facilities staff to determine scope and LEED potential, and oversaw the MEP project manager and team.
- **500 Hadley Rd, South Plainfield, NJ**
This existing approximately 150,000 SF three-story office building had been occupied solely by AT&T. Acted as project manager and lead electrical engineer for the conversion of the building to a multi-tenant arrangement. Upgrades included rework of the main lobby, base building HVAC complete system redesign, electrical distribution modifications to accept multiple tenant, and exterior lighting. Tenant fit-out phases followed.
- **Lucent Technologies, Eatontown, NJ**
Managed multiple renovation projects in an approximately 100,000 SF single story office and led the electrical design. Projects included rework of existing office spaces and electrical labs; takeover of adjacent tenant space; new addition; and warehouse/manufacturing space conversion to offices.
- **King Kullen Corporate Headquarters, Bethpage, NY**
Conversion of an existing 3-story, approximately 150,000 sf multi-tenant office building to single tenant. Project Manager for the MEP team.
- **TD Waterhouse, 100 Wall St, 140 Wall St, Manhattan, NY**
Data center and office space as-built and engineering designs for upgrades on upper floors of these 2 hi-rises. MEP Project Manager and Senior Electrical.

MIXED USE

- **Colonnade Apartments, Newark, NJ**
This well known building is a 22-story residential apartment building built circa the mid 1950s, originally designed by world-renowned architect Mies van der Rohe. Led the team in providing services included Mechanical, Electrical, Plumbing and Fire Protection Engineering that started with detailed site investigations and a comprehensive due diligence report for the entire building inclusive of the apartment spaces and central systems. Personally performed all electrical surveys, created the overall report and wrote the electrical portion plus general sections such as recommendations. The first floor renovation consisted of new mechanical systems for (2) new/reworked large elevator lobbies. The lower level renovation incorporated new tenants, stores, hallway, & laundry room. Full fitout designs for MEP were provided for all renovated areas.
- **Medford Crossing / Urban Retail Center, Medford, NJ**
Principal In Charge of the MEP team for this multi-phased 765,000 SF Target-anchored, open-air and lifestyle retail center. Site is also comprised of: national brand junior anchors, in-line retail, and restaurant tenants; a multi-story municipal building; and 2 mixed use buildings with residential above retail.
- **Blue Back Square, West Hartford, CT**
MEP/FP services for this complex located within a city environment that is being redeveloped includes 4 separate buildings with office, retail, residential and below grade parking. Total area of roughly 600,000 sf not including the parking. Existing buildings were phased in demolition to accommodate the master planning of the area.
- **Medical Arts Building, Hackensack, NJ**
A redevelopment project consisting of below grade parking, grade level retail, and 3 floors of medical office space. Developed the MEP scope of work and concepts.

- **Hampton Bays, Hampton, NY**
Prepared the MEP scope of work, concept designs and spatial coordination and directed Project Manager for this 3 building complex (totaling roughly 20,000 sf) that included office, retail and senior housing.
- **34th Street High Rise, Manhattan, NY**
This high profile project near Penn Station and Madison Square Garden contained a full basement level for electrical and mechanical equipment and offices, 2 levels of retail, a Loews IMAX Theatre, and residential tower. Personal involvement included coordination with the utility company and design of the electrical infrastructure and distribution.

RETAIL CENTERS & MALLS

- **Atlantic Center, Brooklyn, NY**
This large retail center (roughly 1 million sq. ft.) included multiple levels of below grade parking, a Pathmark supermarket, and multiple small and big box retail tenants. Design items of note included smoke purge system, high voltage interior network vault; complex fire alarm systems per the requirements of NY city; fire pumps; parking garage lighting design.
- **Salisbury Mall, Salisbury, MD**
Managed the MEP, prepared the electrical designs and set the design concepts for plumbing and mechanical for building and courtyard additions to add lifestyle center area to existing enclosed 2 story shopping mall. Project included the demolition of one anchor store, extending building, addition of 3 stand alone retail buildings and courtyard. Prepared redesigns for site lighting and fire alarm.
- **Bergen Plaza, Bergen, NJ**
The project was new construction and included a Pathmark supermarket located above an open parking structure. At grade level adjacent to the parking below the supermarket was built a Bradlees department, with parking on the roof at the same elevation as the supermarket.
- **Central Islip Town Center, Islip, NY**
Managed the MEP for a 150,000 sf shopping center inclusive of the design for a King Kullen supermarket.
- **Delco Center, Delco Township, PA**
Redevelopment of a former community mall as an open-air center featuring major anchor, junior anchors, inline retail and restaurants.
- **Montville Commons / Open Air Center, Montville, CT**
250,000 SF open-air center featuring two major anchors and 50,000 SF of inline retail.

SUPERMARKET CHAINS

- **Whole Foods Market, Sarasota, FL**
Led the MEP effort for an approximately 40,000 sf store that was attempting to be the first LEED certified supermarket. Prepared an extensive MEP design narrative illustrating the systems involved and their operations and benefits, as well as commissioning plan and checklists.
- **Pathmark**
Renovations and new construction for more than 100 stores located throughout NY, NJ, PA, CT, DE. Amongst these projects were many located in urban areas, particularly New York City, that contained parking garages below or above or other features adding complexities to the engineering.

- **Stop & Shop**
Managed the engineering effort to create new prototype drawings for a new store concept. Involved with over 50 renovations and new stores in NY, NJ, MA, CT, RI. Also led a team that mobilized quickly to help convert first the Edwards chain and a year later Grand Union stores to Stop & Shops throughout NY and NJ.
- **Winn Dixie**
Managed the engineering team responsible for providing field investigations, due diligence reports and construction documents for over 20 renovation projects annually. Prepared new lighting design and led MEP team for a new store in New Orleans that was devastated during the Hurricane and was pushed forward by the community in need of a grocery store to serve the population returning to the area a couple years after the storm. The A/E design was prepared to be unique, not in accordance with the Winn Dixie existing prototype, to rival high end competition.
- **Significant Supermarket Chain Experience also with:**
A&P, Albertsons, Acme, ShopRite, King Kullen, Hannaford, Price Chopper, Fairway Market, Foodtown, Fresh Fields, Genuardi, Giant Food Stores, Giant Eagle, Gourmet Garage, Redners, Safeway, Fresh Grocer,

CHAIN RETAIL

- **Significant Big Box/Home Improvement/Department Store experience including :**
Sears, Home Depot, Kmart, Bradlees, BJs Wholesale Club, Caldor. Involvement ranges from preparing electrical design documents to project management to client management and overseeing the MEP and Structural teams. Projects range from one-of renovations to many site adapts of a particular retail to unique challenges such as a 6-story, whole block building conversion to a Caldor on Fordham Rd in the Bronx.
- **Significant Small Box experience including :**
Office Depot, Staples, Pep Boys, TJ Max, Circuit City, Best Buy, Modell's Sporting Goods, Marshalls, CVS, Walgreens and more. Landed and managed the Office Depot account for rollout program in the Northeast, where new stores were constructed in abandoned spaces. Performed site investigations, client site walkthroughs, and concept designs for all disciplines

HOSPITALITY

- **Applebees – East River, Manhattan, NY**
Principal and Client Manager for this ground up urban restaurant that upon final approval will be the first location in the Applebee's chain to be LEED certified. Our team provided the LEED consulting and Commissioning in addition to the MEP Engineering. I was actively involved in creating and leading the LEED charrette and presentation, while overseeing the PM and team on the Engineering effort.
- **Delaware Travel Plaza**
Responsible for the engineering team providing MEP/FP design for this new 45,000 sf building on Rte 95 to be the first LEED certified and flagship project for an international food service company. Participated in the numerous early interactions with team to understand client needs and preferences and determine MEP concepts and LEED target points. Systems include geothermal heat pumps, daylight harvesting and rainwater harvesting.
- **JFK Airport, Restaurants at Terminals 1, 2, 3 and 7.**
Field investigations and MEP construction documents and construction phase support for numerous new and converted food service operations in multiple terminals. Many of these areas included mechanical and electrical systems heavily taxed due to continuing

development, requiring creative engineering. All projects included Port Authority review and required approvals. Projects included Todd English Bonfire, Wolfgang Puck, Samuel Adams, Balducci's, Sbarro, Napa Valley Wine Bar, Medalist Bar, Greenwich Village Bistro, Legends Bar, Bombay Sapphire, Chilis, Wendys, and more.

- **Jimmy Buffet's Margaritaville**
PIC for engineering for multiple locations for this themed restaurant chain. Projects ranged from 14,000 sf to 25,000 sf with locations in Hawaii, Mohegan Sun Casino, Phoenix, and Florida. Complex engineering designs varied greatly by location. For instance, mechanical systems included connections to central plan chillers and steam; heat pumps to condenser water in one location that took 2 floors of a 4 story building; and air-side systems with energy recovery in a new building in humid climate. Demanding projects included continual client and team support with evolving floor plans and specialty lighting and equipment on aggressive design and construction schedules.
- **Higher Ed Dining Halls**
Field investigations, due diligence reports, client interactions and construction recommendations for leading food service provider to schools. Locations included SUNY Maritime in Queens, NY and Sarah Lawrence College in Bronxville, NY.
- **Significant Chain / Small Restaurant Experience including:**
IHOP, Red Robin, Turning Point, Chili's, Starbucks, Panera Bread, Wawa.
- **LA Fitness, Mt Laurel, NJ**
Project Manager for conversion of a 50,000 sf supermarket to a new health club. Performed field investigations of all disciplines (mechanical, electrical, plumbing and fire protection) and developed concept designs that reutilized the existing systems to the maximum extent possible. Involved in other health club projects including Boston Sports Clubs.

ACADEMIC

- **Neptune School District, Neptune, NJ**
Activities ranged from classroom and department modifications to service upgrades for renovations where new air conditioning was provided as well as reports on existing facilities for state funds.
- **Hudson County School District, Hudson County, NJ**
Involved in organizing a team of engineers to perform surveys and prepare reports for funding for the Abbot program.
- **Paterson Public School District. Paterson, NJ**
Participated in the design of a district wide network for integrated computer, fire alarm and CCTV systems.
- **Don Bosco Prep High School. Ramsey, NJ**
Project Manager for MEP and lead electrical for renovations on this 3 building private school campus. The first phase included a due diligence report, with subsequent phases involving classroom renovations and kitchen and gymnasium improvements..

MUNICIPAL

- **Doc Cramer Park, Stafford Township, NJ**
Created master electrical plan for the expansion and upgrade of this existing township recreation park, and then construction documents for the various phases of work over a 3 year period. Athletic facilities included baseball fields, softball fields, football fields, soccer fields, basketball courts, tennis courts, roller rinks. The design included utility services,

distribution to electrical enclosures throughout the park, irrigation design, and sportlighting and parking lot lighting design.

- **Dover Township Parks and Athletic Fields, Dover Township (Toms River), NJ**
Investigations and written reports along with analysis and recommendations for the electrical services, conditions and lighting at numerous locations throughout the township.
- **Mt Laurel MUA, Mt Laurel, NJ**
Sustainable design and LEED support, including due diligence analysis of existing building to determine LEEP certification potential and preparation of RFP for public bid to professionals.

HEALTH CARE

- **Riverview Medical Center – East Wing Cancer Center, Red Bank, NJ**
Renovation of the top 2 floors of a 4-story building to a long-term patient cancer care unit. Role was both project manager and lead electrical engineer. The unit contained chemotherapy treatment rooms, stem cell transplants and isolation rooms. Designed normal, emergency and life safety systems in accordance with the health care sections of the NEC, as well as hospital specific low voltage systems such as nurse call.
- **Cardiac Catheterization Labs – Riverview Medical Center, Red Bank, NJ and Rahway Hospital, Rahway, NJ**
Prepared the electrical designs for the construction of these new outpatient facilities in both of these hospitals and managed the MEP through the end of construction.
- **Bayonne Hospital – Alcohol Detox Unit, Bayonne, NJ**
Renovation of an existing wing of the hospital to develop an area dedicated to treatment of patients with alcohol addiction. Unit consisted of new nurse center, new bedrooms, treatment rooms, lounge facilities, and administration area.
- **Bayonne Hospital – Pharmacy Renovation, Bayonne, NJ**
Renovation to the 2nd floor area of the 'B' building, approximately 5,050 sq. ft. Project consisted of the installation of a new Pharmacy unit and demolition of existing patient area. Items of note included: Reception desk; Vestibule; Storage; Compounding/Labeling Room; Dispensing Stations; Ante Room; IV and Chemo Clean Rooms.