A quarterly publication of the Boston Chapter of the National Electrical Contractors Association

POWERPOINTS

A Message from the Executive Manager

NECA's Industry-leading Focus on Safety

When ever a major safety incident occurs on a job site, the first question is: “Could more have been done to have ensured a safer work environment?” It is the right question to ask and it should be asked, and answered, every day on every job site, before any safety incident ever happens.

NECA is proud to set the electrical construction industry standard when it comes to safety training, programs, and procedures. Our member contractors and our labor partners, the electricians and technicians of IBEW Local 103, are provided every resource available to help ensure the implementation of, and adherence to, sound safety procedures on each job site.

This issue of Connections provides a closer look at just some of those safety programs, including our sponsorship (with IBEW Local 103) of the industry’s most comprehensive electrical safety training programs for electricians and technicians, administered by the JATC Greater Boston; Boston Hot Work training that is well underway; the recently updated NECA Safety App that further improves on-site safety for our contractors; the implementation of the Material Safety Data Sheets program; and, NECA’s close, hands-on involvement in safety codes and standards development as an appointed member of the NFPA Standards Council.

In this issue, we also feature several diverse NECA projects in Greater Boston: the Avalon North Station high-rise residential/mixed-use project with electrical construction provided by T&T Electrical and three other NECA Boston contractors; the Route 9 Kenneth F. Burns Bridge lighting project in Shrewsbury with Moulinson Heavy Electrical providing expertise; MEC Power Group’s high-voltage work at Mystic Station; J&M Brown’s primary electrical construction of the 585-unit residential/mixed-use project at 345 Harrison Ave. in the South End and also at Wentworth’s Schumann Library renovation; and JM Electrical’s control systems project at Mildred C. Hailey apartment complex in Jamaica Plain.

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INDUSTRY NEWS

NECA Boston Chapter Confirms 2017 Board of Directors

WEST NEWTON — Boston Chapter of the National Electrical Contractors Association (NECA) confirmed its 2017 Directors and Officers at its Annual Chapter Meeting in January. Joseph McCluskey, Jr., of E.G. Sawyer Co., Inc. is serving in his second year as Chapter president.

Seated (l to r):
William Weber, Treasurer — Gaston Electrical Co., Inc.
Joseph Bodio, Governor – LAN-TEL Communications
Joseph McCluskey, Jr., President – E.G. Sawyer Company, Inc.
Michael McDonald, Vice President — McDonald Electrical Corp.
Alan Scharfe, Secretary — John A. Penney Company, Inc.

Standing (l to r):
Kristen Gowin, Assistant Manager — NECA Boston Chapter
John McLaughlin, Director — Sullivan & McLaughlin Companies
Gregory Sapochetti, Director – J.F. White Electrical
John Quinci, Director – Cruz Electric, Inc.
Kathleen Guinee, Director – Aetna Fire Alarm Service Co., Inc.
Thomas Driscoll, Director – E.S. Boulos Company
Brian Murphy, Director – A. Murphy, Inc.
Glenn Kingsbury, Executive Manager — NECA Boston Chapter

Board Members (not pictured):
Paul Guarracino, Director – J.M. Electrical Company, Inc.
David Noon, Director – J. & M. Brown Company, Inc.
Stephen Scarpini, Director – Scarponi Electric, LLC

Safesites

NECA Boston Chapter Leads Industry in Electrical & Tel/Data Safety Training

Safety News

NECA Updates Safety Meeting App
NECA Appointed to NFPA’s Standards Council
2017 NECA Safety Professionals Conference in Las Vegas, NV, May 22 – 25

Industry News

NECA Announces 2017 Project Excellence Awards

Powerpoints

continued

On these, and every project that NECA contractors construct, the project owners, developers, facility managers and general contractors can be assured that safety is the first priority of our contractors on every site.

Connections

Connections is a quarterly publication of the Boston Chapter of the National Electrical Contractors Association / Electrical Contractors Association of Greater Boston, Inc., 106 River Street, West Newton, MA 02465. Phone 617-969-2521. Mission: CONNECTIONS is designed to provide information relating to current happenings in the electrical construction industry in Eastern Massachusetts, Maine, and New Hampshire and to report activities of the Boston Chapter of NECA and its members. Your comments are welcome. We can be reached via e-mail at: info@bostonneca.org
SHREWSBURY, MA — Moulison Heavy Electrical, based in Biddeford, Maine, has completed the state-of-the-art LED lighting and lighting control system of the arches and handrails at the Kenneth F. Burns Memorial Bridge on Route 9, which connects Shrewsbury and Worcester over Lake Quinsigamond.

The project also entailed Moulison’s installation of surrounding traffic signals and roadway lighting. Due to the high-traffic location, much of the electrical work was done after rush hour, between 8pm and 6am. Moulison Heavy Electrical’s Project Manager Dave Power supervised a crew of eight Local 96 electricians in the project which spanned more than three years and was completed in 2016. 

**PROJECT HIGHLIGHTS**

The under-bridge lighting project, comprised of 64 rectangular LED spotlights installed on the piers of the bridge, was handled by the Moulison crew working on a barge. Dynamic lighting control settings are achieved by a controller located at the bridge or by MassDOT via a laptop.

**Moulison Heavy Electrical Provides LED Lighting Control at Kenneth F. Burns Memorial Bridge, Route 9 in Shrewsbury, MA**

NECA contractor teams with GC: Middlesex Corp. on MassDOT bridge lighting project

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Moulison Heavy Electrical provides LED lighting control at Kenneth F. Burns Memorial Bridge, Route 9 in Shrewsbury, MA. NECA contractor teams with GC: Middlesex Corp. on MassDOT bridge lighting project.

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LYNNFIELD, MA — JM Electrical Company, Inc., teaming with BCM Controls of Woburn, recently completed installation of 36 exterior elevator and common area security cameras in five buildings of the Mildred C. Hailey Apartments at the Bromley Park complex in Jamaica Plain, MA. The NECA contractor also installed antennas enabling wireless communications between the buildings in the 25-acre development. BCM provided the security cameras and executed all programming of the security system.

**JM Electrical Completes Security Project at Mildred C. Hailey Apartments, Jamaica Plain, MA**

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**McDonald Electrical’s MEC Power Group Installs 345kV Tower at Mystic Generating Station in Charlestown**

NECA Boston contractor teams with Electrical Engineer: Stantec, Boston, MA; Owner: Exelon Generation, LLC

CHARLESTOWN, MA — MEC Power Group, the high-voltage, utility division of McDonald Electrical, recently furnished and installed an 85-foot H-frame 345kV tower structure at Mystic Generating Station to increase the ground clearance of an existing 345kV transmission line. The NECA Boston contractor completed the work during a 3-day power outage of the Mystic 7 diesel turbine. MEC Power Group expedited procurement of all materials and the contractor’s crew of six IBEW Local 103 electricians performed installations on the fast-track project in constricted work space at the fully operational power station. The project was headed by MEC’s Division Director Chris Lombardi.

**PROJECT CHALLENGES**

The structure, set on concrete spread footings, is designed to support the existing 795 ACSR conductors and shield wires. MEC extended existing transformer taps to accommodate the increased cable height. The installation required the use of two 100-ft man-lifts, a 90-Ton crane to raise the poles, and a 60-Ton crane to place the cross-arm.
BOSTON, MA — J&M Brown Company, headquartered in Jamaica Plain, MA, is underway with comprehensive electrical construction of 345 Harrison Avenue, the new 585-unit luxury residential/multi-use complex in Boston’s South End. The development is comprised of two 14-story buildings, housing 535,900 square feet of residential space and 33,550 square feet of ground floor retail and restaurant space. JMB’s scope entails installation of the complete electrical distribution system, LED lighting, fire alarm system and tel/data systems. The tel/data system installations are being provided by J&M Brown’s low voltage division, Spectrum Integrated Technologies.

The 345 Harrison complex, developed by Boston based UDR, will have a phased occupancy with the first phase opening scheduled for January 2018. The aggressive schedule requires all electrical systems, and the complete fire alarm installation to be fully functioning at that time. The total project has targeted completion in summer 2018, and all major electrical systems will be completed months in advance.

J&M Brown Project Managers Patrick O’Neil and Kimberley Estabrooks are managing the project with a field crew expected to range upwards of 40 to 50 IBEW Local 103 electricians at peak construction.

345 Harrison Avenue’s amenities include a four-level parking garage with a green roof, 13th floor Sky Lounge, resort-style pool and state-of-the-art fitness center. The project is integral to the City’s revitalization plans for the South End. Across the street from the Ink Block, the residential complex is near key public transit hubs — the MBTA Red, Orange and Silver Lines are all within walking distance.

To streamline the construction process in the tightly scheduled project, JMB is utilizing the Trimble MEP layout solution platform. JMB’s CAD Coordinator Kelly Flynn and General Foreman Wayne Lucas, have planned electrical conduit layouts and installation areas using a 3D positional data system, enabling the JMB field crew to handle installation with exacting precision and maximum efficiency. Also enhancing the project’s consistent workflow, in the pre-construction phase, General Foreman Phil Talbot has designed layouts, and pre-planned material and labor requirements for the development’s apartment units.

J&M Brown Completes Wentworth’s Schumann Library Renovation

Architect: Perkins + Will, Boston; EE: ARUP, Boston; GC: Consigli Construction, Boston

BOSTON, MA — In a three-month “summer slammer” project, J&M Brown Company (JMB), of Jamaica Plain, MA, completed the comprehensive electrical, fire alarm, tel/data and security system renovations at the Wentworth Institute of Technology (WIT) main library – the Douglas D. Schumann Library, in August 2016.

The multifaceted scope included upgrading the 45,000 s/f facility’s electrical distribution system, which encompassed installation of all new electrical panels; new energy-efficient LED lighting; and lighting control; a new fire alarm system; and the build-out of 12 conference rooms, inclusive of the installation of the backbone to new Audio Visual systems.

JMB served as single-source provider for the Wentworth library renovation, as Spectrum Integrated Technologies installed the facility’s upgraded tel/data and security systems. To enhance the project’s efficiency and meet WIT schedule requirements, during pre-construction J&M Brown provided extensive planning and CAD coordination for all lighting and conduit pathways.

JMB managed an IBEW Local 103 field crew of 28 electricians at peak construction. Close coordination among all project team members — JMB, Consigli, P&W, ARUP and WIT, was critical in meeting the aggressive schedule. Construction was performed in a partially occupied building.

The renovated Schumann library features a modern, open environment design and incorporates building upgrades that focus on sustainability and energy-efficiency.
BOSTON, MA — In January 2017, T&T Electrical Contractors, Inc., based in Everett, MA, completed the comprehensive electrical construction of Boston’s newest residential high-rise – the 38-story, 600,000 square-foot Avalon North Station residences, located at 1 Nashua Street, adjacent to the TD Garden and North Station.

The NECA Boston contractor provided core and shell electrical installations, encompassing the facility’s primary and emergency power systems, as well as interior electrical fit-out of the residential tower’s 503 residential apartment units. The scope also included installation of the high-rise fire alarm system, which integrates with the TD Garden and MBTA life safety systems. The system includes a bi-directional fire alarm antenna, enabling communications with the Boston fire department from all points in the building.

T&T Electrical met demanding material and personnel scheduling requirements inherent in the high-rise construction project, and made more challenging due to the tight site and its location in the busiest area of North Station. The project was constructed in a special six-phase process, in which floors 1-13 and the mechanical penthouse were built in the first phase, followed by floors 14-20, then 21-25, 26-30, 31-34, and 35-38.

In the earliest construction phase, T&T also provided temporary power to the site, brought in from the MBTA at North Station.

T&T Electrical managed a skilled electrical field crew that ranged upwards of 44 IBEW Local 103 electricians in the nearly two-year project. The NECA contractor worked in close coordination with the project’s owner AvalonBay and Construction Manager John Moriarty & Associates, of Winchester, MA.

Avalon North Station, designed by CBT Architects, is a smart-growth sustainable design project. The contemporary 415-foot tall, largely glass facade mixed-use building houses a mix of studio, one, two, and three-bedroom apartments and penthouses. It features a state-of-the-art fitness center, Wi-Fi cafe and lounge, private conference space and a sky lounge / rooftop terrace overlooking the downtown skyline, Zakim Bridge and Boston Harbor. On the first two levels, a 3,575 square-foot public retail arcade passageway will connect Nashua Street and Causeway Street.

PROJECT HIGHLIGHTS

T&T Electrical’s extensive lighting package includes outfitting the mixed-use facility’s first floor retail shopping arcade with an array of decorative interior lighting fixtures, comprised of custom pendants, theatrical lighting, LED Flex tube, and wall-wash linear lights. The building’s exterior is dramatically lit with specialty LED exterior lighting, operated via a state-of-the-art Lutron lighting control system. The building’s contemporary, largely glass facade includes risers on the north and south sides of the building, each spanning 400 feet, as well as highlighting grazers along the roof line. LED floods shine up on the west side of the building to wash the building’s facade. The contractor also provided site lighting on the west entrance, including lit bollards, trellis and half walls.
SAFESITES

NECA Boston Chapter Leads Industry in Electrical & Tel/Data Safety Training

As the NFPA / City of Boston’s Hot Work Safety Certificate Program, took effect on January 1, 2017, and the City also introduces its new construction site safety regulations, NECA Boston Chapter and our member contractors are well prepared to help ensure stringent electrical safety programs and procedures are in place and strictly adhered to on construction sites.

Safety initiatives designed to establish, maintain safest possible workforce and worksites

As leader in its commitment to safety, NECA Boston and IBEW Local 103 proudly co-sponsor the JATC Greater Boston Electrical Training Program, recognized nationally for its comprehensive training curriculum, state-of-the-art training facility, and its focus on safety training.

Hot Work Training Ongoing at Greater Boston JATC

In October 2016, the JATC Greater Boston implemented the Boston Hot Work Certificate Training Program. To date, more than 80 stewards, journeymen and apprentice electricians have completed the curriculum developed by the Boston Fire Department in collaboration with the NFPA, which is focused on preventing fires in buildings during construction. The program trains all construction workers engaged in hot work operations to identify fuel and ignition sources, informing them of all applicable standards, regulations, and ordinances. Hot Work Certificate Training will continue at the JATC throughout 2017.

NECA Safety Meeting App and MSDS Enhance Job Site Safety

NECA Boston also recently introduced the new NECA Safety Meeting App which our contractors are utilizing in the field to monitor safety on site and enhance job site safety training. A cloud-based management tool, the Safety App enables field personnel to efficiently and effectively manage and document safety meetings. It includes hundreds of general safety talks provided by experts in the field of electrical construction. (See news on the updated NECA Safety Meeting App on page 6.)

Also in place to help ensure NECA Boston contractors are the safest in the industry, is the use of the Material Safety Data Sheets (MSDS) program, providing up-to-date information on the proper use of hazardous materials.

As safety is the number one priority for NECA contractors, we look forward to working with the City of Boston to ensure all contractors working on projects in the City are employing the safest work practices,” said Joseph McCluskey, Jr., CEO of E.G. Sawyer Company and President of NECA Boston Chapter. “On a national level, NECA works with the NFPA in helping develop the codes and standards that guide safety procedures and requirements in our industry, including the National Electrical Codes, and specifically NFPA 70E,” said McCluskey.

NECA Boston is focused on having our contractors consistently implement the safest electrical construction procedures and policies on each and every job site.”

Joseph McCluskey, Jr.
E.G. Sawyer Co. President, NECA Boston Chapter

Multifaceted Safety Training in State-of-the-Art JATC Safety Facility

In that safety training is the cornerstone on which all electrical training is based, the safety initiatives that NECA makes available are multi-dimensional. They cover all aspects of safety in the field, beginning with the industry’s most comprehensive safety training program provided to all apprentice electricians and technicians, administered through the JATC of Greater Boston.

The JATC training educates apprentices on all safety issues and appropriate safety procedures that must be implemented in the workplace. The detailed curriculum, developed by the Electrical Training Alliance, utilizes a blended learning method, incorporating 1,000 hours of classroom training, 10,000 hours of training in the field, and online training. The safety courses in the curriculum and conducted in the state-of-the-art JATC electrical training facility include: • OSHA 10 Hour and 30 Hour Training • Job Information & Orientation • Safety-related Work Practices • First Aid and CPR • Boston Hot Work Training Program • Confined Spaces • NFPA 70E • Medium Voltage Cable Splicing

The JATC provides in-depth video and Powerpoint presentations on job site safety issues, including Arc Flash, PPE, Fall Protection, Confined Space, and many other safety requirements.

Beyond the industry’s most apprenticeship comprehensive training program, NECA Boston and the JATC Greater Boston have ongoing continuing-ed programs in safety procedures for journeymen and foremen, including advanced foremen training.

“As the City of Boston institutes new policies as relates to construction site safety, NECA Boston Chapter looks forward to continuing our efforts to make sure our contractors are the safest in the industry, as well as being the most skilled in all aspects of electrical and tel/data construction,” said NECA Boston Chapter Executive Manager Glenn Kingsbury.
SAFETY NEWS

NECA Updates Safety Meeting App

ETHESDA, MD — On January 27, the National Electrical Contractors Association (NECA) announced new updates to the NECA Safety Meeting App, the cloud-based monitoring tool that members are utilizing in the field to improve on-site safety training. The updates improve performance and functionality for smart devices and tablets. It assists NECA contractors in complying with requirements for documenting mandatory safety meetings and incidents that may occur on job sites.

NECA members now have these additional functions and resources in the job briefing/checklist space of the app:

- Job Briefing – Electrical, Transmission and Distribution
- NFPA 70E Job Briefing • Safety Checklist • Equipment Checklist • Truck/Site Safety Checklist • Fall Protection Inspection Checklist • Vehicle Inspection Checklist

The app now includes the option of having separate multiple users within the same organization that has separate departments or divisions.

“The improvements to this very popular safety tool are a direct result of input from NECA members who are using the app,” said Wesley Wheeler, NECA Director of Safety. “NECA Safety Meeting App’s additional functions allow contractors to document and verify activities that are taking place on the job in real time, another reason to include the app as an essential and effective addition to their safety tools and resources.”

Mike Johnston, NECA Executive Director of Standards and Safety said, “This popular NECA Safety product will make a notable difference in how any organization manages and documents safety meetings, job briefings and other common safety checklists.”

For more information, visit www.necasafetyapp.com or contact Wheeler at (301) 215-4546.

NECA Appointed to NFPA’s Standards Council

ETHESDA, MD — Feb. 6, 2017 – The National Electrical Contractors Association has been appointed to the National Fire Protection Association’s (NFPA) Standards Council by the NFPA’s Board of Directors. Michael J. Johnston, NECA’s executive director of standards and safety, represents the association for a three-year term that began Jan. 1, 2017. The NFPA Standards Council, a 13-member body, is charged with overseeing the NFPA codes and standards making process. The duties of the Council include supervising activities related to NFPA codes and standards development, acting as administrator of rules and regulations, and serving as an appeals body.

“Through my input, NECA will represent the entire electrical industry on Council decisions and the work it does on all NFPA standards, including the firefighter standards, sprinklers, and many more,” Johnston said. “It is an honor to be selected to work with the NFPA in this capacity.”

Johnston is the chairman of the National Electrical Code Correlating Committee and an alternate on NEC CMP-1 (Code-Making Panel). NFPA 70: National Electrical Code is a regionally adoptable standard for the safe installation of electrical wiring and equipment in the U.S. In addition to his responsibilities managing codes, standards, and safety functions for NECA, Johnston is secretary of the NECA Codes and Standards Committee and is vice chair of the NFPA Electrical Section.

2017 NECA Safety Professionals Conference in Las Vegas, NV, May 22 - 25

The electrical industry’s premier annual safety event, the National Electrical Contractors Association Safety Professionals Conference, will be held at the Tropicana Hotel in Las Vegas, May 22 - 25, during National Electrical Safety Month. Safety directors, HR directors, project managers, risk managers, and electrical supervisors from throughout the U.S. will attend. All aspects of safety in electrical construction will be covered, including Best Policies and Practices, NECA Safety Systems, Inside and Outside Electrical Construction, OSHA Regulations under the new Administration, NFPA 70B and 70E, Safety Risk Management, and much more. For complete details, and to register, visit necasafetyconference.com.

ELECTRICAL INDUSTRY NEWS

NECA Announces 2017 Project Excellence Awards

DEADLINE FOR ENTRY MARCH 31ST

In an effort to showcase the exceptional work performed by its member-contractors throughout the country, the National Electrical Contractors Association has launched the Project Excellence Awards, a new award program that will recognize companies for their outstanding commitment, professionalism and ingenuity in delivering an electrical project across 11 different market sectors:

- Commercial/Institutional • Design Build
- Educational • Energy Solutions/ Green Building • Health Care • Industrial
- International • Overhead Transmission • Residential • Street Lighting/Traffic Signal
- Substation/Interconnection

Awards will be on the electrical/technology portion of the project for projects valued either under or over $1 million for each market sector, except for overhead transmission and substation/interconnection, and must be based on projects completed in 2016. Entry forms are available at www.necanet.org and deadline for entry is March 31, 2017. Winning projects will be presented at the national convention, NECA Seattle 2017, October 7 - 10.