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Lynwell Associates completes electrical work on Edward Kennedy Institute for U.S. Senate facility

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Lynnwell Associates has completed the electrical construction of the new Edward M. Kennedy Institute for the U.S. Senate facility at Columbia Point on the UMASS Boston campus. The NECA contractor's electrical project scope was comprehensive, encompassing the installation of primary and emergency power distribution systems, interior and exterior lighting and the facility's intelligent Lutron lighting control system, a Siemens fire alarm system, and electrosonic audio-visual (AV) systems in exhibit spaces. Lynnwell's project also included electrical fit-out of University of Mass. teaching classrooms as well as installations for the Institute's two large mechanical areas; a new chiller plant for the adjacent JFK Library; a full-scale replica of the U.S. Senate Chamber including the viewing gallery; and, a replica of senator Kennedy's Washington office.

The Edward M. Kennedy Institute features custom lighting throughout its exterior and interior spaces, including at its entrance, where fifty concrete bollards, each engraved with the name of a state in the U.S. and the date in which it became an official state, are lit by in-ground LED light fixtures. Custom-crafted wall sconce fixtures replicating authentic U.S. Senate fixtures were installed by Lynnwell in the Senate Chamber gallery and also in the Senator's office. Each fixture was, individually, custom-made from a mold.

Among logistical challenges met by Lynnwell was the electrical work performed within the chamber. All of the ceiling electrical work in the chamber dome was completed from 50-foot high staging with only a small interior ladder providing access.

The project included several design modifications during construction, which lead to a tight schedule and rigorous coordination of electrical and AV installations.

Lynnwell's project management team was headed by president Dennis Mahoney, project executive Larry Mahoney, project manager Michael Smart, outside superintendent John Lievi, and chief estimator Craig Canha. General foreman Mike Dutton and four project foremen supervised the field crew of 43 Local 103 electricians and four telecommunications technicians at peak construction. Electrical construction commenced in January 2013 and was completed in February 2015.

Mahoney said, "Lynnwell Associates is proud to have been a member of the Edward M. Kennedy Institute's construction team. We worked closely with construction manager Lee Kennedy Company to ensure project schedules were met and also with Local 103 and business agent Gary Walker to make sure the project was constructed with a crew comprised of 50% Local 103 Boston residents. The institute is a state-of-the-art facility that promises to be an important landmark in Boston, Massachusetts, and our nation."

The Edward M. Kennedy Institute for the United States Senate opened to the public on March 31st following a dedication ceremony held on March 30. The official dedication ceremony featured a celebrated list of speakers, including President Barack Obama, vice president Joseph Biden,

Republican senator John McCain, and the late senator Kennedy's wife, Victoria Reggie Kennedy, who along with him, is a co-founder of the Institute. It was attended by numerous U.S. Senators and colleagues of the late senator Kennedy, prominent Massachusetts officials, including governor Charlie Baker and Boston mayor Martin Walsh, and members of senator Kennedy's family.

Boston Lightning Rod, Inc. served as a subcontractor to Lynnwell in providing engineering, design and installation of the facility's exterior lightning protection system. The specialty project was headed by PM Andrew Mulholland supervising two lightning protection technicians from IBEW Local 103.

The Edward M. Kennedy Institute features:

* 68,000 s/f museum, exhibits, classrooms and office space
* Exact replica of U.S. Senate Chamber; lobby with Senate exhibits; classrooms; library/research area; archival storage; offices; exact replica of late Senator Kennedy's office
* Exhibition hall features interactive kiosks, graphic panels, videos, and historical artifacts
* The exhibition hall leads into classrooms, which will be designed as a continuation of the Senate experience, with direct video links to the Chamber in Washington D.C.
* Library archive, where visitors will be able to peruse digital records of images, documents, video, audio, and other media.

J.M. Electrical Co. provided the Edward M. Kennedy Institute's sophisticated HVAC control/building automation system installations.

In a uniquely challenging aspect of the project, the chiller plants for the adjacent Kennedy Library were relocated to the new Institute facility during construction. Within its scope, J.M. Electrical seamlessly repositioned the chiller plant controls for the Kennedy Library and integrated them into the same backbone as the Institute's chiller control system, and then put the system back online. This entailed bringing an elaborate system of pumps, valves, actuators, and frequency drives under control and integrating them so that they function as one system. To accomplish ongoing HVAC service at the Kennedy Library, a parallel system of temporary chillers was utilized so that humidity and temperature control in the critical museum environment was always maintained.

Climate control, also vital to the new Edward M. Kennedy Institute's museum environment, is fully computer-controlled to assure an optimal environment. The building automation system constantly monitors all spaces within the facility and adjusts based on real-time conditions. It is programmed to alert management as to any adjustments that may be required with control of the building's automation system operable via the facility's engineering office.

J.M Electrical project manager Niall Black and foreman Hugh MacKinnon headed the NECA contractor's field crew of IBEW Local 103 electricians in a project that commenced in August 2013 and was complete in October 2014. The NECA team "coordinated closely with Lynnwell Associates to ensure the HVAC control systems went online as scheduled," Black said.

NECA contractor LAN-TEL Communications provided the new Edward M. Kennedy Institute's telecommunications infrastructure, which is comprised of a Main Distribution Frame (MDF) on the second floor and four Intermediate Distribution Frames (IDFs) on the first floor. The tel/data backbone consists of traditional fiber optic and copper cable runs, interconnecting the MDF with each of the four IDFs. LAN-TEL's crew of six Local 103 technicians also installed wireless access point throughout the building. Project manager Dave Stevenson and foreman Brian Collett headed LAN-TEL's project team in the six-month tel/data project, which was completed in September 2014.