VDC Technician

Reporting To: Prefabrication Division Manager
Department: Electrical Pre-Construction
Job Type: Full-time

Summary

The VDC Technician is responsible for developing, managing, and coordinating detailed 3D and 2D models of electrical systems to support construction project planning and execution. Working closely with project teams, PLD Specialists, and field personnel, the VDC Technician uses Building Information Modeling (BIM) tools and Virtual Design and Construction (VDC) techniques to ensure design accuracy, optimize workflows, and facilitate cross-discipline coordination. This role requires a keen eye for detail, a strong understanding of construction practices, and proficiency in industry-specific modeling software.

Primary Responsibilities

- Model electrical systems including raceway modeling, circuiting, and equipment setting using Revit MEP, AutoCAD MEP and Navisworks.
- Create 3D model out of existing 2D CAD plans as required.
- Develop detailed and accurate drawings, documents, and models using BIM and/or CAD software programs with information obtained from rough sketches and/or architecture and engineering design information.
- Produce accurate building models and drawing sets using engineering, detailing, and field markups.
- Reviews drawing and designs to ensure adherence to established specifications, standards, and codes.
- Learn rules, regulations and client detail design specifications, applying learned knowledge to drafting.
- Ensure all drawings and models follow established standards and procedures.
- Set up plot sheets, sections, and details for projects.
- Plot and export field points to be used with a total station.
- Participate in coordination meetings to communicate model updates and resolve design issues.
- Maintain model documentation, including project specifications, standards, and as-built records.
- Generate detailed build documents to be used to construct in the field and in prefabrication.
- Assist with the development and maintenance of VDC standards, templates, and libraries.
- Collaborate with field teams to ensure VDC models are practical for installation and address real-world challenges.
- Provide technical support to field personnel, answering questions and troubleshooting model-related issues as needed.
- Assist in training internal teams on VDC and BIM software, such as Revit, Navisworks, and AutoCAD.
- Additional duties as assigned.

Qualifications

- Minimum 1-3 years in VDC, BIM, or CAD modeling within the construction or electrical industry.
- Associate or Bachelor’s degree in Construction Management, Engineering, Architecture, or related field is a plus but not required.
- Proficiency in Revit, Navisworks, and AutoCAD; experience with other BIM software is a plus.
- Understanding of construction workflows, specifically in electrical systems design and installation.
- Strong organizational skills and the ability to manage multiple tasks simultaneously.
- Excellent communication and collaboration skills, with a solution-oriented approach to problem-solving.
- Attention to detail, ensuring precision in all model elements and drawings.

Physical Requirements

- The role involves extended periods of sitting at a desk, working on a computer, and using BIM and CAD software.
- Regular use of hands and fingers to operate a computer, mouse, and other office equipment.
- Precision in handling and manipulating digital models, which requires fine motor skills.
- Good vision (with or without correction) is essential for reviewing detailed drawings and 3D models on a computer screen.
- The ability to focus on close-up work for extended periods is important due to the nature of modeling software.
- Ability to lift and carry documents, laptop computers, or small equipment weighing up to 20 pounds.
- May involve occasional bending, reaching, or stretching to access files or set up equipment.

- Occasional movement around the office and project sites may be required.

Construction Site Visits (if applicable):

- While the role is primarily office-based, there may be occasional visits to active construction sites.
- Requires the ability to walk, stand, and observe for extended periods on uneven surfaces, with potential exposure to various weather conditions.
- Personal protective equipment (PPE) like hard hats, safety glasses, and steel-toed boots may be required during site visits.

Nothing in this job description restricts management's right to assign or reassign duties and responsibilities to this job at any time.