ERDMAN ANTHONY, NEW YORK, USA

Key Facts
Company: Erdman Anthony
Website: www.erdmananthony.com
Industry: Buildings and Infrastructure, Retrofits and As-Builts, Water Treatment, Product Handling
Country: New York
Products Used:
• CAESAR II®
• CADWorx® Plant Professional
• CADWorx® Steel Professional
• CADWorx® Equipment

ERDMAN ANTHONY CHOOSES CADWORX® AND CAESAR II®, IMPROVING PROJECT COLLABORATION AND REDUCING COSTS

PROVIDING INFRASTRUCTURE ENGINEERING AND SUPPORT SERVICES

Founded in 1954, Erdman Anthony is a multi-disciplinary firm that specializes in infrastructure engineering and support services. Headquartered in Rochester, N.Y., USA, Erdman Anthony focuses on providing cost-effective infrastructure solutions for government and private-sector clients such as geospatial services, civil engineering, facilities engineering and design services, transportation engineering and construction services.

EASTMAN KODAK PROJECT COMPLEXITIES PRESENT CHALLENGES

Erdman Anthony was part of the Footprint Reduction Program (FRP) project for Eastman Kodak in Rochester, N.Y., a three-year, $190M project on which the firm handled 80% of the project engineering and design. The Eastman Kodak project involved demolitions and relocations within a 120-year-old plant that included over 200 buildings spread over 1,000 acres of land. Thousands of pieces of relocated and new equipment, from coating machines to condensate pumps, plus over 100,000 feet of piping modifications were involved. One of the main challenges on the project was a need to schedule system shutdowns during the demolition of some buildings while ensuring continuous operation of the other systems.

MINIMIZING REWORK AND REDUCING COSTS

Because of the project’s challenges involving multiple systems, Erdman Anthony decided to use CADWorx Plant, CADWorx Steel and CAESAR II, in part because the programs allow engineers and designers to share information back and forth with ease. When compared to the plant design system it used in the past, it were able to eliminate such costly negatives as inaccuracies in bids and estimates, rework due to incorrect project deliverables and the inability to verify the correct installation and
design of piping supports and steel. “CADWorx and CAESAR II allowed us to minimize rework and to pre-order materials ahead of time, reducing the cost of materials due to potential price increases,” said Clint VanDewark, senior designer at Erdman Anthony. “As an example, this helped us identify a 50% error in the estimation of 24-inch chilled water piping required on the project.”

ENSURING DYNAMIC DATA EXCHANGE AND SUCCESSFUL PROJECT COLLABORATION

Hexagon products allowed Erdman Anthony to perform stress analysis, easily extract data from models and ensure a dynamic exchange between the analysis tool and the model, with successful interaction among all of the design team members. This collaboration helped eliminate errors of omission. “3D visualization allowed for client, contractor and design team interaction that resolved hundreds of questions and assisted with strategic planning,” explained VanDewark.

OBTAINING THE DETAILED SCOPE OF COMPLEX AREAS

Design deliverables developed by Erdman Anthony included standard CAD drawings, piping layouts, sections, details, schedules, equipment and piping specifications, demolition drawings and points of connection with shutdown coordination details. “Even with plans and sections in place, we still had complex areas that required the production and issuance of additional fabrication drawings complete with all the dimensions and BIM data,” added VanDewark. “CADWorx helped us to use piping BIM data to communicate the detailed scope with very little additional effort.”

ABOUT HEXAGON

Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE). Our industry-specific solutions create smart digital realities that improve productivity and quality across manufacturing, infrastructure, safety and mobility applications.

Hexagon’s PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.5bn EUR. Learn more at hexagon.com and follow us @HexagonAB.

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