



SUFFOLK

Suffolk Construction turns planning into precision with coordinated layout from Rugged Robotics.

THE PROJECT

SUFFOLK CONSTRUCTION

➔ Suffolk Construction was hired as the general contractor of a new \$32M government center located in Mesquite, TX. This center will serve as a hub for government operations in Dallas County—including a Tax Office, Constable Office, and Justice of the Peace and Juvenile Services offices, in addition to a community space and early voting area.

As a recent entrant to the Dallas market, this project was a meaningful opportunity for Suffolk to demonstrate their position at the forefront of technological innovation, differentiate their services to owners and developers, and edge out competing bids.

Suffolk worked with VIA Technik, a leading BIM and VDC services firm, alongside Rugged in a coordination process to ensure the model precisely matched the drawings. Rugged's expert operators then used Mark1 layout robots to duplicate the model into reality, printing a full multi-trade layout—including drywall, MEP pass-throughs, light fixtures, door hardware, and more—in a single pass.

Project:

DALLAS COUNTY MESQUITE
GOVERNMENT CENTER

Use Case:

MULTI-TRADE LAYOUT

Project Size:

56,325 SQ/FT

KEY BENEFITS OF RUGGED'S MULTI-TRADE LAYOUT

Coordinated Layout Efficiency

By coordinating layout across multiple trades at once, VIA Technik and Rugged reduced rework by 75%+ due to **mitigating downstream clashes** and inaccuracies.

Precise Model Translation

Rugged's automated layout service precisely translated the model into reality, mirroring design plans and leading to **installation efficiencies**.

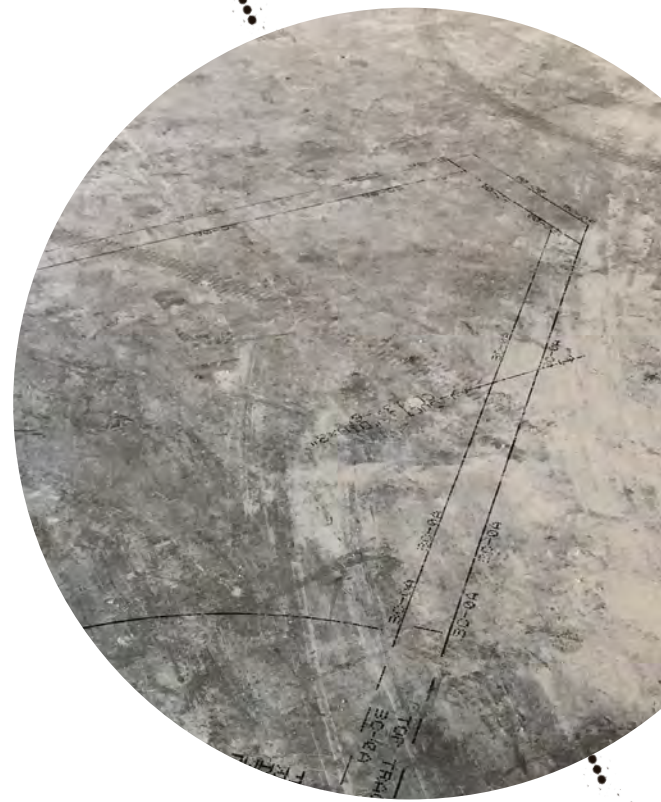
Schedule Time Reduction

Efficient layout execution by Rugged accelerated the project's build schedule by **reducing layout schedule by 60% per floor**.

THE CHALLENGE

→ The Suffolk team was under schedule pressure throughout this project and any added delays, especially those stemming from layout inaccuracies, could have had a cascading effect. Incorrect layout regularly leads to field clashes between trades, and requires significant rework that could have not only delayed progress but also strained the budget and jeopardized crucial deadlines.

Given their technology-forward mindset, the team chose to mitigate these risks via pursuing a truly coordinated model that would provide the perfect starting point for Rugged's automated layout service, which brings every trade's layout into the field simultaneously.



“As Suffolk establishes itself in Dallas, our team really needed to get this right to cement our position as a tech-forward player in a competitive market. This project demanded precision across trades on tight timeline and Rugged delivered—starting from working with us to ensure that we were working from the highest-quality model, all the way to flawless layout execution.”

HUDSON HARRIS, SUFFOLK ESTIMATOR

THE SOLUTION

➔ In order to execute multi-trade layout efficiently, the first step is to establish a truly coordinated model. Teams can tackle this either internally or with the assistance of a provider like VIATechnik. The model serves as the foundation for integrating construction elements—including architectural features, MEP systems, and key elements like lighting fixtures—into a cohesive layout.

Rugged Robotics' involvement began during this coordination phase, with Rugged's internal VDC team joining Suffolk and VIATechnik's regular coordination meetings, and discussing automated layout before setting out into the field. This early engagement ensured the project's model was optimized to take advantage of automated layout including additional detail that can lead to installation savings.

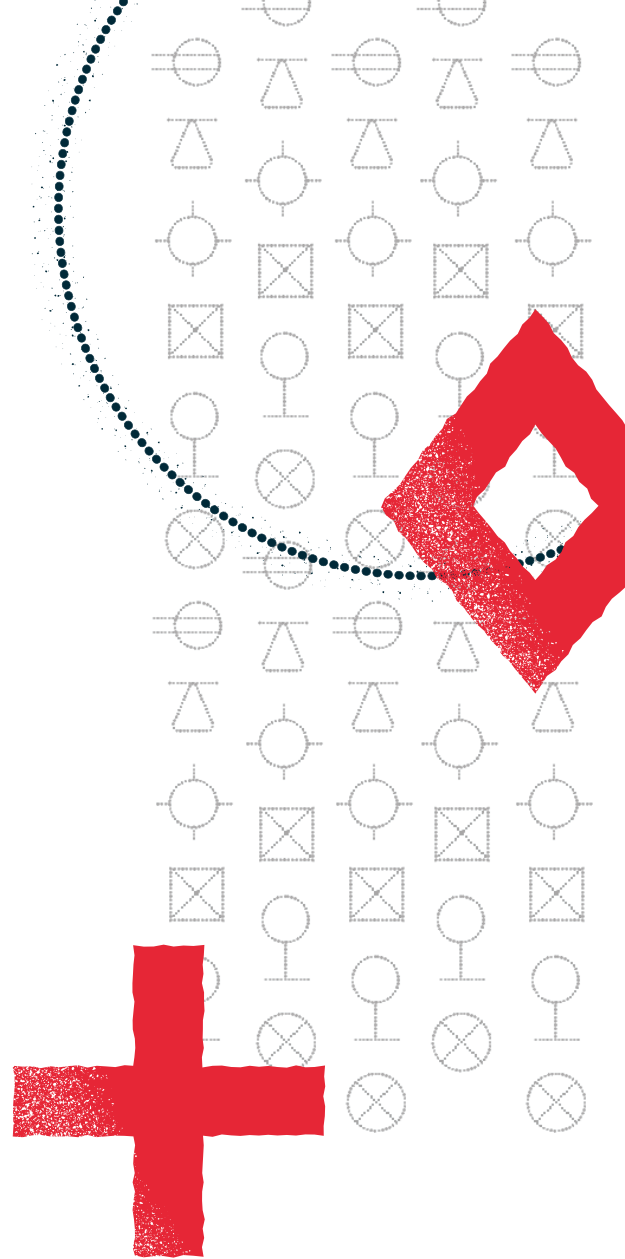
Once the project was ready for layout, the Rugged team arrived with two Mark1s and two experienced operators. After verifying the control network, they deployed their robots to create a detailed multi-trade layout in a fraction of the time as traditional solutions.



THE IMPACT

➔ The model's accuracy, paired with Rugged's involvement in the coordination effort, was a game-changer for the layout process and the project as a whole. Working from a detailed and accurate multi-trade model from the start, the Rugged team was able to streamline the entire layout process and avoid the delays that typically come from rectifying inaccuracies or coordination clashes in the field, ultimately reducing rework by 75%+.

Rugged's automated layout reclaimed valuable time for the project, compressing the initially scoped layout schedule from 7-8 days per floor to just three days, a reduction of 60%. This efficiency not only propelled the project forward by restoring much-needed momentum but also facilitated an earlier install start for the trades. By reducing rework, Rugged helped to mitigate potential setbacks—ensuring the project remained on track.



AUTOMATE.
ACCELERATE.
DOMINATE.



Leave manual methods in the past and let Rugged Robotics modernize your layout processes. No more crawling around snapping lines—just pinpoint precision, detailed information, and expedited results.

GET STARTED ➔