

ROUNDBOUT REINVENTED: HOW CONGRUEX'S COST- SAVING SOLUTIONS AVOIDED UTILITY RELOCATION

INTRODUCTION

In the spring of 2019, Wright County proposed the construction of a new roundabout at the intersection of Odean Ave and County Rd 39 in Wright County, Minnesota. The project was placed on an accelerated design and construction schedule to take advantage of available funding, with construction set to begin in the spring of 2020.

With tight deadlines and a need for seamless execution, the project required careful coordination between multiple stakeholders, including utility providers. Any unforeseen conflicts could lead to costly delays, making early planning and problem-solving essential to keeping the project on track.



Digital Loop Carrier System DSL Electronics Cabinet

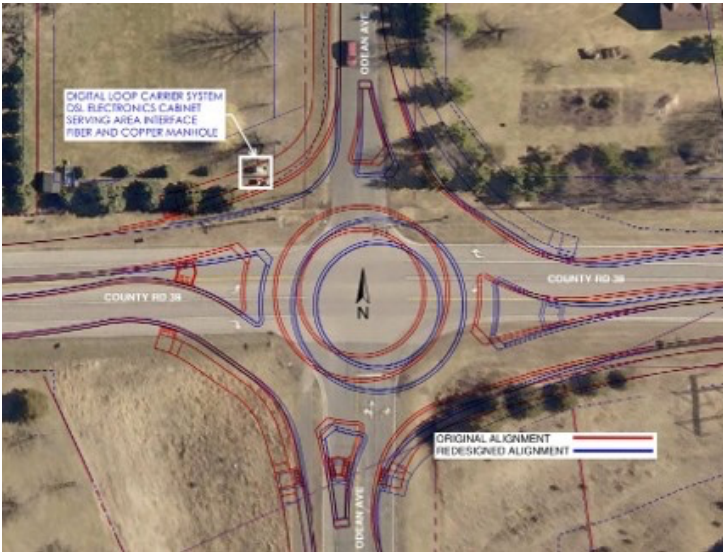
CHALLENGE

In November 2019, Congruex received 30% project plans from the customer and initiated a comprehensive review, including civil analysis, facilities inventory, and Level A subsurface utility engineering. During this process, it was identified that the project posed a major conflict with a remote site containing critical telecommunications infrastructure.

The site included a:

- **Digital Loop Carrier System**
- **DSL Cabinet**
- **Copper Serving Area Interface**
- **Secondary Power Pedestal**
- **Splice Pedestal**
- **Buried Splice Vault**

Traditional solutions—such as relocating these facilities—would have required significant time and cost, posing a challenge to the project's accelerated timeline and budget constraints.



Original project alignment vs. Redesign alignment.

SOLUTION

Congruex's professional engineers carefully analyzed the civil plans and identified a strategic alternative. By reviewing land acquisition records, it was determined that Wright County had secured sufficient right-of-way on the southeast corner of the project. This allowed for a realignment of the roundabout, eliminating the need for costly and time-consuming utility relocations.

Congruex collaborated closely with the County's design firm to modify the roundabout layout, ensuring that the critical infrastructure could remain undisturbed while maintaining the project's engineering and safety requirements.

RESULTS

By leveraging innovative design modifications, Congruex successfully eliminated the utility conflict, resulting in:

- **\$175,000** in project savings
- **14 months** of work eliminated
- Avoidance of **complex** and **costly** facility relocations

This solution not only saved significant time and money but also minimized disruption to existing telecom infrastructure, ensuring uninterrupted service for the local community. By eliminating the need for major utility relocations, the project avoided potential permitting delays, construction complications, and service outages.

Additionally, the collaboration between Congruex, the County's design firm, and project stakeholders showcased the value of early utility coordination in infrastructure projects. The streamlined approach allowed the roundabout to move forward on schedule while maintaining safety, efficiency, and long-term reliability for both the roadway and the existing utility network.

Congruex's expertise in utility conflict resolution once again proved invaluable, demonstrating the power of creative engineering solutions in fast-tracked digital infrastructure projects.

From consulting and engineering to construction, we have the specialized expertise to tackle the toughest utility conflicts.

To learn more visit www.congruex.com.