Kansas City, Missouri – Signal design and interconnect at Hickman Mills Drive and Marion Park Drive





Existing signal at Hickman Mills Drive and Marion Park Drive

R^3C Design Group recently assisted Kansas City Capital Project Office with traffic engineering for the proposed KCMO South Patrol Office near the Hickman Mills Road and Marion Park Drive intersection. The existing signal at this location was modified to accommodate the fourth east leg for the KCMO South Patrol facility. Further, the 20-year old signal was completely upgraded to current standards as part of this project.

We displayed our **Responsibility** by completing the plan development, review and approval in less than a month. Because available time was limited, we took a proactive approach to the plan process. We provided designs to the greatly assistive City staff for review as soon as they were ready, optimizing their effort and enabling them with the quick review. Further, after the initial meeting with staff, we realized that per Operation Green Light (OGL) requirements, a signal interconnect was required from this intersection to the Bannister Road and Marion Park Drive intersection. A fiber optic interconnect was designed and implemented.

Our designers were **Responsive** to the needs of City staff, and the changing requirements of the Manual of Uniform Traffic Control Devices (MUTCD). Because the MUTCD changed left-turn signal requirements to a four-section head, with flashing/steady yellow signal indications for permissive movements, we replaced all left turn heads for the City as part of the project. The aging signal controller was replaced to meet OGL needs. Pedestrian signal heads were also upgraded to meet current ADA standards. Street lighting was also upgraded as part of this project.

Our **Client- focus** was displayed through our ownership of the project. R^3C Designers made it their personal mission to complete and deliver a headache-free project in less than a month between survey and project completion for the Civil Engineer, Architect and the City.

The RIGHT factors during this project are:

- Completing project between survey and final submittal in less than a month
- Upgrading the signal to meet Operation Green Light requirements
- Upgrading pedestrian needs to meet ADA standards
- Upgrading signal heads to meet the latest MUTCD requirements
- Fiber optic interconnect to the existing signal at Bannister Road and Marion Park Drive
- Collaborative, proactive review process with the great assistance from City staff allowed for optimizing review time

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Construction cost estimate: \$150,000.00

(signal modification only)