



Paving the Way to

# BETTER ROADS

*Founded by former MPO directors over 30 years ago, Lochmueller Group specializes in infrastructure design for local and state agencies throughout the Midwest.*

*We understand the challenges facing clients today and continually strive to maximize benefits at every stage of a project's life to provide designs that are...*





# ...SENSIBLE

As planners, as well as designers, we appreciate that the short- and long-term needs driving projects are unique and can change over time due to economic, demographic, technical, environmental, or other dynamic conditions. In an era where officials and taxpayers have little tolerance for additional funding due to unanticipated needs, we find that investing a little more to gain a thorough assessment of current conditions and goals before design begins, yields big dividends in saving time and money later on.

A large part of our success in finding cost savings is due to our holistic approach to projects. Designers work daily with in-house experts in environmental services, traffic, right-of-way, constructability, and public outreach to evaluate all aspects of a project. This includes access and economic development impacts, environmental permitting considerations for both the natural and human environments, and traffic concerns.

*"The city appreciates the sensitivity Lochmueller Group showed in developing an innovative solution that considered the aesthetic and economic development impacts of this project on the community, while at the same time increasing safety for our residents and supporting the business goals of one of our largest employers."*

## The Best Time to Save Money Is Before a Project Starts

When asked to review the scope of an intersection improvement project, Lochmueller Group roadway designers consulted with in-house traffic experts, who determined that resigning and restriping the intersection would solve the high crash rate—saving over \$700,000 in construction costs.

# ...INTEGRATED

The diversity of transportation projects is infinite, with each project having its own unique features with respect to size, conditions, budget, and schedule. In addition third parties, such as utilities, property owners, permitting agencies and others can have major impacts on both schedules and budgets.

That's why we've found the best way to maximize value and avoid headaches is to integrate a variety of disciplines seamlessly throughout the design process. Often minor changes in design can eliminate or reduce right-of-way, environmental, or utility impacts. Public involvement experts also assist in communicating to stakeholders and building project consensus.

With offices throughout the Midwest, our design staff also shares their knowledge of what new approaches and materials various states are using and how they work.



*"When we were forced to accelerate our schedule to accommodate another project, Lochmueller Group did an excellent job of delivering a quality design at a brisk pace and staying on top of utility coordination to make sure there were no conflicts when construction was ready to begin."*



# ...SUSTAINABLE

Many municipal clients today are looking for projects that not only address transportation needs, but improve quality of life and enhance economic attractiveness. Lochmueller Group has designed a number of projects that incorporate elements such as:

- » Roundabouts
- » Green Infrastructure for Stormwater Run-Off
- » Bikeway & Pedestrian Facilities
- » Stream & Habitat Mitigation
- » Aesthetic Design Elements & Streetscape
- » Transit-Oriented Design

*"Lochmueller Group delivered an exceptional design that incorporated the needs of all residents. Thanks to Lochmueller Group's resourcefulness, our city will now be a better, more accessible place for all residents."*



# ...CONSTRUCTIBLE

Lochmueller Group's in-house staff of resident engineers and construction inspectors provides a resource to designers in terms of constructability and understanding of how contractors view designs. They are well acquainted with the most cost-efficient approaches to construction and with what works best in the field, as well as on paper. Their expertise is available to provide insights to changing material and labor costs and construction phasing.



*"Your specifications and addenda were very well thought out and very descriptive of what will be expected. I truly do believe that better plans and specs provide the owner with the best possible bids and will turn into a successful project."*



# OFFERING

## STRUCTURAL DESIGN

- » Bridge Inspection
- » Bridge Replacement
- » Bridge Rehabilitation
- » Historic Bridge Rehabilitation
- » Overpasses & Interchanges
- » Retaining Walls
- » Drainage Structures
- » Railroad Bridges
- » Load Rating

## ROADWAY DESIGN

- » Urban/Residential Street Design
- » Complete Streets
- » Highway/Freeway Design
- » Interchanges
- » Multi-Modal Facilities
- » Signage Inventory & Design
- » Pavement Markings
- » Traffic Signal Design
- » Streetscape

## TRAFFIC ENGINEERING

- » Traffic Signal Warrants Evaluations
- » Traffic Signal Timing/Optimization
- » Safety Studies
- » Parking Studies
- » Intersection Design Studies
- » Traffic Calming

## TRAFFIC PLANNING

- » Traffic Impact Studies
- » Site Access Planning
- » Feasibility Studies
- » Access Justification Reports
- » Access Management
- » Transportation System Management
- » Roundabout Analysis & Design
- » Traffic Calming

## TRANSPORTATION PLANNING

- » Long-Range Transportation Plans
- » Transit Systems
- » Pedestrian & Bicycle Transportation
- » Context Sensitive Solutions
- » Public Outreach & Education
- » Street & Road Asset Management

## ENVIRONMENTAL SERVICES

- » NEPA Corridor Studies & Documentation: Environmental Impact Statements & Assessments
- » Indirect & Cumulative Impacts Analysis for Natural Resources
- » Socioeconomic Impacts
- » Noise Analysis Modeling & Barrier Studies
- » Section 106 of NHPA for Historic Structures and Archaeological Sites
- » Section 4(f) Documentation
- » Stream Assessments & Mitigation/Restoration
- » Karst Studies
- » Field Surveys for Animals, Plants & Ecosystems
- » Threatened and Endangered Species Consultation
- » Water Quality Testing
- » Section 404 Permit from the United States Army Corps of Engineers
- » Stormwater Permitting
- » Wetland Delineations, Designs, Monitoring, Maintenance, Site Selection and Land Acquisition

## STORMWATER MANAGEMENT

- » Bioswales & Rain Gardens
- » Constructed Wetlands
- » Retention Basins

## LAND ACQUISITION SERVICES

- » Abstracting
- » Analyzing Property Lines
- » Evaluating Existing Land Rights
- » Existing Road Right-of-Way Analysis
- » Legal Descriptions
- » Right-of-Way Parcel Plats
- » Staking Right-of-Way
- » Appraisals & Review Appraisals
- » Negotiations
- » Relocations

## CONSTRUCTION PHASE SERVICES

- » Constructability Review
- » Bid Review
- » Inspection & Observation
- » Conflict Resolution
- » Construction Testing
- » Project Record-Keeping

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