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## **GKC CONSULTING COMPANY**

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George K. Clem, President  
501 Graham Drive  
Chesterton, Indiana 46304-1615  
phone/fax: 219-926-1378

[www.gkcconsulting.com](http://www.gkcconsulting.com)  
[george.clem@comcast.net](mailto:george.clem@comcast.net)

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A career of 40 years in the railway industry has provided the means for the establishment of my own successful business.

Experience has been gained from both sides of the industry; as the Manager of Engineering with a railway supplier, and the Manager of Engineering with a railroad.

Through the years, I have developed an extensive network of railroaders, vendors, and experts that I can rely on to obtain detailed technical information on any aspect of the railway industry.

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## **EXPERIENCE**

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### **GKC CONSULTING COMPANY**

**1995 – PRESENT**

Established my own business, providing assistance with project management; developing new equipment (enlisting people from various fields working together); capital development plans; creating quality assurance procedures; technical training; proposals.

### **HOLLAND COMPANY**

**1985 – 1995**

A manufacturer of rail welding equipment and freight car parts, and provider of rail welding contract service. Sales and services provided internationally. During 1989-95, gross income grew from \$9 million to over \$28 million.

#### **Manager of Engineering**

- Directed all engineering administration, design, and manufacturing for a new division, Equipment Development. (1992-95)
- Directed the activities of five departments: Engineering, Quality Assurance, New Product Development, Manufacturing, and Service. (1988-92)
- Directed Engineering and Manufacturing for the Rail Weld Division and Freight Car Parts Division. (1985-88)

### **CHICAGO SOUTH SHORE & SOUTH BEND RAILROAD**

**1968 – 1985**

A 90-mile freight railroad and electrified commuter railway carrying 12,000 passengers per day and 10 million ton-miles of freight.

#### **Manager of Engineering/Assistant Chief Engineer (1978 – 1985)**

- Directed strategic planning, new projects, assisted overall administration.
- Directed the construction and maintenance of all facilities including track, buildings, bridges, electrification system, power sub-stations, and computerized supervisory control.
- Responsibilities included the selection and maintenance of all track equipment, catenary equipment, and fleet vehicles.
- Managed 78 people, all maintenance of way equipment and inventory. Prepared department's annual budget.

#### **Engineer of Maintenance of Way & Structures (1968 – 1978)**

(Also held positions of Engineer, Engineering Aide, Surveying chain-man)

- Started as temporary employee for the summer as college student and worked both full and part time while attending Purdue University.
- Learned surveying, project management, budgeting, estimating, drafting, and civil engineering.
- Became full time Engineer in 1972.

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## **GKC CONSULTING COMPANY ACHIEVEMENTS**

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### **CLIENT – COMMUTER & FREIGHT RAILROAD**

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Since 1995, I have had a continuing contract as a consultant with this 90 mile electrified, rapid-transit railroad, assisting them with the maintenance of way. Involved in long range planning; capital projects; maintenance of way equipment, track and structures; stations; and the design, construction, and inspection of all of these. Among the projects I have done, or am currently working on:

- **Westlake Corridor Study**

I prepared a conceptual route study for track through the city of Hammond, Indiana. Three routes were proposed: One route was at grade, crossing two major railroads and many major streets. A second route was aerial, over-passing all major railroads and streets. The third route, was under-passing all major railroads and streets. Exhibits and preliminary costs estimates were made for use in the route discussion process. This study was used to obtain funding for detailed engineering and costs for the favored route.

- **Project Manager**

- Designed and managed the addition of a second mainline track and the relocation of the existing track.
- Responsible for planning and construction of new passenger station.

- **Strategic Planning**

Prepare five year, and annual maintenance plans, allocating over \$23 million. The plans includes track, structures, signals, overhead power distribution, M/W equipment, fleet vehicles, and materials. I am involved in this continuing project, participating in regular meetings and creating plans, which include required manpower, timelines, and associated costs.

- **South Bend, Indiana – Railroad Relocation for Airport**

Prepared drawings for the proposed track alignment that terminates at the airport. These drawings were super-imposed on aerial photographs providing a true visual representation. Tracks proposed for the railroad operations included: passing tracks, terminal tracks, and storage tracks. The railroad used these exhibits for operational approvals.

- **Innovative Design for Elevated and Handicapped Platforms**

Working to upgrade its passenger stations, a new concept of elevated and handicapped passenger platforms had to be developed to accommodate the wider freight trains that also use the track. Two different concepts of moving platforms had to be created. As Project Manager, part of my work includes revising, approving, and supervising the design, manufacture, and installation.

- **Maintenance of Way Quality Assurance Manual**

Lacking written MOW procedures, I wrote a QA manual and trained their staff, addressing the specifics of their track and right-of way maintenance, following the recommendations of AREMA.

## **CLIENT – CIVIC GROUP – ROUTE FEASIBILITY STUDY**

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A civic group in Michigan City, Indiana wants the railroad to relocate the track that runs down the middle of the street. I prepared a report for them on methods for obtaining funding for a detailed route study relocation, moving the track out of city streets, into a combined railroad corridor. Estimated costs were provided for each phase of the project. Phases included conceptual, route approval, detailed engineering and construction.

## **CLIENT – EQUIPMENT MANUFACTURER**

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Engineered and supervised the manufacture of a track vehicle; a high speed rail tribometer (patented) used to help manage track lubrication by measuring the coefficient of friction of rail. I coordinated the development and testing with the client and the AAR/TTC. The HSRT is now performing contract service to railroads.

## **CLIENT – STEEL MILL**

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Developed track maintenance quality assurance programs, and instructed their staff and crews on track maintenance, derailment prevention and investigation, repair welding of frogs and turnouts; designed new track layouts for the plant, and inspected the track construction.

- **Maintenance Savings of \$500,000**

The first year following my planning and training, this client (with 100 miles of track and 800 turnouts) saved \$500,000. I produced a customized track quality assurance manual, standards for installation and maintenance practices, and trained personnel. Derailments were reduced by 50% within three months. Additional training was provided to determine the causes of derailments and eliminate them.

- **Track Layout**

Plant track modifications were required for the delivery of unit coal trains to a new coke manufacturing plant. I designed track layout for coal handling, and assisted with construction work and placed track in service.

## **CLIENT – RAIL WELDING COMPANY**

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- **Quality Assurance Manual**

Authored rail welding quality assurance manual and trained their staff in the methods necessary to maintain those quality standards

- **Marketing Brochures**

Wrote and produced two 20 page marketing brochures containing concise explanations and photographs of their intrack rail welding and cut-and-slide processes.

## **CLIENT – TRACKWORK MANUFACTURER (ENGLAND)**

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Worked to restore the hardness of rail after welding and forging. Analyzed their operation and designed a plan of action. Also, designed air-cooling equipment for the process, which was manufactured in England.

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## **CLIENT – INTERNATIONAL TRANSPORTATION SERVICE (KAZAKHSTAN)**

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I was hired to work for a railroad in Central Asia. Formerly part of the Soviet Union, but now an independent state, they needed to buy equipment on the open market. I wrote the tender specifications (general and specific) for 15 new maintenance of way machines. Tenders were required to be in English and Russian. My work was completed in Central Asia, and also in my office via e-mail.

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## **CLIENT – INTERNATIONAL DEVELOPMENT CONSULTING COMPANY (INDIA)**

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As the team leader of a group railroad experts we assessed the quality and progress of the construction of various railroad projects in India. This involved on-site inspections of track, bridges, stations, and electric catenary throughout the country. Written reports on our findings, along with our recommendation were made.

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## **EDUCATION**

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| 1971 | Purdue University: BS Construction Engineering Technology<br>Minor: Civil Engineering |
| 1969 | Purdue University: AAS Architectural Technology<br>Minor: Electrical Engineering      |

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## **ASSOCIATIONS**

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### **American Railway Engineering and Maintenance-of-Way Association (AREMA)**

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A member since 1972: AREMA is responsible for writing the industry standards for railway maintenance as published in the Railway Engineering Manual, updated annually.

Member of Committee 27 – Maintenance of Way Work Equipment: Committee is comprised of people in the railway industry with experience and knowledge in maintenance of way equipment. We write the *Specifications for On-Track Machinery*.

### **American Welding Society - Committee 15D: Rail Welding**

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My participation in rail welding associations includes; authoring the rail welding standards for the *American Welding Association's Recommended Practices for the Welding of Rails and Related Rail Components for Use by Rail Vehicles, Chapter 5 – Flash Welding (FW)(Electric Flash Butt Welding) of Rail (ANSI/AWS D15.2-94, An American National Standard)*

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## **PATENTS**

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- US 06192736 Tribometer for testing efficiency of lubrication on rail (2001)
- US 04854088 Method for Rail Grinding (1989)
- US 04751794 In Track Rail Base Grinder (1988)