

# Global Solutions, LLC.

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**SBE, MBE, DBE, 8(a)/SDB**

## Your Strategic Partner



# OUTLINE OF PRESENTATION

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# COMPANY INFORMATION

## Who is Global?

- Global is a Civil Engineering firm offering services in Transportation/Traffic Engineering, Sanitary Sewer, Storm Sewer, Water, MS4, Project Controls, Document Controls and Project Schedule using Primavera P6
- Global is certified as a Minority Business Enterprise (MBE) and Disadvantaged Business Enterprise (DBE)
- SBA 8(a)/SDB





# Management

## Vinay K. Polepalli, MS, MBA, PE, PMP

- ❑ Experience:
  - 20+ years combined experience as a Principal of the firm, Project Manager , Senior Engineer and Project Engineer
- ❑ Education:
  - MS in Civil Engineering, University of Kentucky
  - MBA from University of Louisville with a specialization in entrepreneurship
- ❑ Certifications:
  - P.E. licensed professional engineer in the states of Ohio, Kentucky and Indiana
  - Project Management Professional (PMP) certified by PMI
- ❑ Leadership Positions in Professional Organizations:
  - Board member Kentuckiana Post Society of American Military Engineers
  - Member of Small Business Committee, Kentuckiana Post SAME
- ❑ Memberships:
  - Society of American Military Engineers (SAME)
  - Kentucky Society of Professional Engineers



# Professional Staff

## Gregory Traupman, PE

- ❑ Experience:
  - 7 years of experience designing roadways, traffic signals, stormwater networks, and analyzing hydraulic and hydrologic data.
- ❑ Project Experience:
  - Ohio River Bridges Project, US 31 Kokomo Corridor, SR66, DPW Cultural Trail, Possum Run Bridge, City of Delphi Utility Relocation
- ❑ Education:
  - BS in Civil Engineering, Purdue University, West Lafayette, IN
  - INDOT Certified Technician Program
- ❑ Certifications:
  - P.E. licensed professional engineer in the states of Kentucky and Indiana
- ❑ Memberships:
  - ASCE





# Professional Staff

## Steve M. Kurowsky, EIT

- ❑ Experience:
  - 17 years of experience designing various elements of roadways and associated utilities and right-of-way takings. Highly experienced with Maintenance of Traffic plan preparation.
- ❑ Project Experience:
  - Ohio River Bridges Project, KY 22, I-65, KY 163, KY 1501, I-640, Industrial Parkway, SR 63, SR 111, WV 34 Teays Valley Road, I-64 widening
- ❑ Education:
  - MS in Civil Engineering, University of Louisville - 1997
  - BS in Civil Engineering, University of Louisville - 1996
- ❑ Certifications:
  - E.I.T. in the states of Kentucky



# Mission Statement

To consistently provide quality, dependable and affordable service and to continually strive to develop long-term and mutually-beneficial relationships with our Clients

# Vision Statement

To be the Partner of Choice for both Public and Private sector clients



# Core Capabilities

## Civil Engineering Services

- **Highways/Roadways**
- **Traffic Engineering**
- **Sanitary Sewer Design**
- **Storm Sewer and MS4**
- **Erosion Prevention and Sediment control Plans**
- **Site Civil –Retail/Commercial, Industrial and Military**
- **Utility Coordination**
- **Project Controls**
- **Project Schedule – Primavera P6**
- **Document Controls**
- **Construction Administration Services**





# Market Sectors

## ■ Private Sector:

- A&E firms : Jacobs Engineering, Parsons Transportation Group, Stanley Consultants, Michael Baker Corp, URS, Brown and Caldwell, Gresham Smith and Partners, QK4, AECOM, HDR, Northrop Grumman etc
- Highway Engineering firms
- Construction Companies

## ■ Public Sector:

- Municipal Utilities
  - MSD, Louisville Water Company, LGE
  - MSD, Cincinnati, OH
  - Louisville Water Company
- Local Government
- State Government
- Federal Government
  - U.S. Army Corps of Engineers
  - Veterans Administration



# Global's Valued Clientele



LWC

Brown AND Caldwell





# Recent Projects

- **Ohio River Bridges Project East End Crossing – Sub-consultant to Jacobs Engineering**
- **Ohio River Bridges Project Downtown Crossing – Sub-consultant to Jacobs Engineering**
- **Glenview Bluff WQTP Elimination Project – MSD, Louisville, KY**
- **TVA Paradise Portal Building – Civil Engineering**
- **Polk Run WWTP Reliability and Service Upgrades – Cincinnati MSD, Louisville, KY**
- **Klondike Interceptor Project – MSD, Louisville, KY**
- **Chenoweth Run Interceptor Project Section I & II – MSD, Louisville, KY**
- **Ohio River Bridges Project – Section 2, Michael Baker Corp/KYTC**
- **Emergency Water Supply Project – VA, Louisville, KY**
- **MS 4 Storm Water Program – MSD, Louisville, KY**
- **MS 4 Program Support – URS Corporation**
- **Master Service Agreement – Water Distribution – HDR, Inc.**
- **MS4 BMPs and SWPP document development – Gresham Smith and Partners, Inc.**





# Recent Water/Wastewater Projects



# SAMPLE PROJECTS

## Glenview Bluff WQTC Elimination Project

Client: MSD, Louisville, KY

### Project Scope:

Involves in designing a 1,600 LF of 2.5" force main and eliminate an existing water quality treatment plant and install a grinder pump and odor control equipment. This proposed force main connects an existing 8" gravity sewer

### Critical Design Elements:

Densely populated neighborhoods, utilities, crossing a two-lane highway, close proximity of fully matured trees.

Construction Cost: \$400K



# SAMPLE PROJECTS

## **Klondike Interceptor Project**

Client: MSD, Louisville, KY

### Project Scope:

Involves in designing a 3,400 LF of 36" gravity sewer interceptor connecting to Hikes Lane Interceptor on the downstream end and Jeffersontown Branch 1, 24" force main on the upstream end. 120 LF of 48" tunnel under a four-lane highway.

### Critical Design Elements:

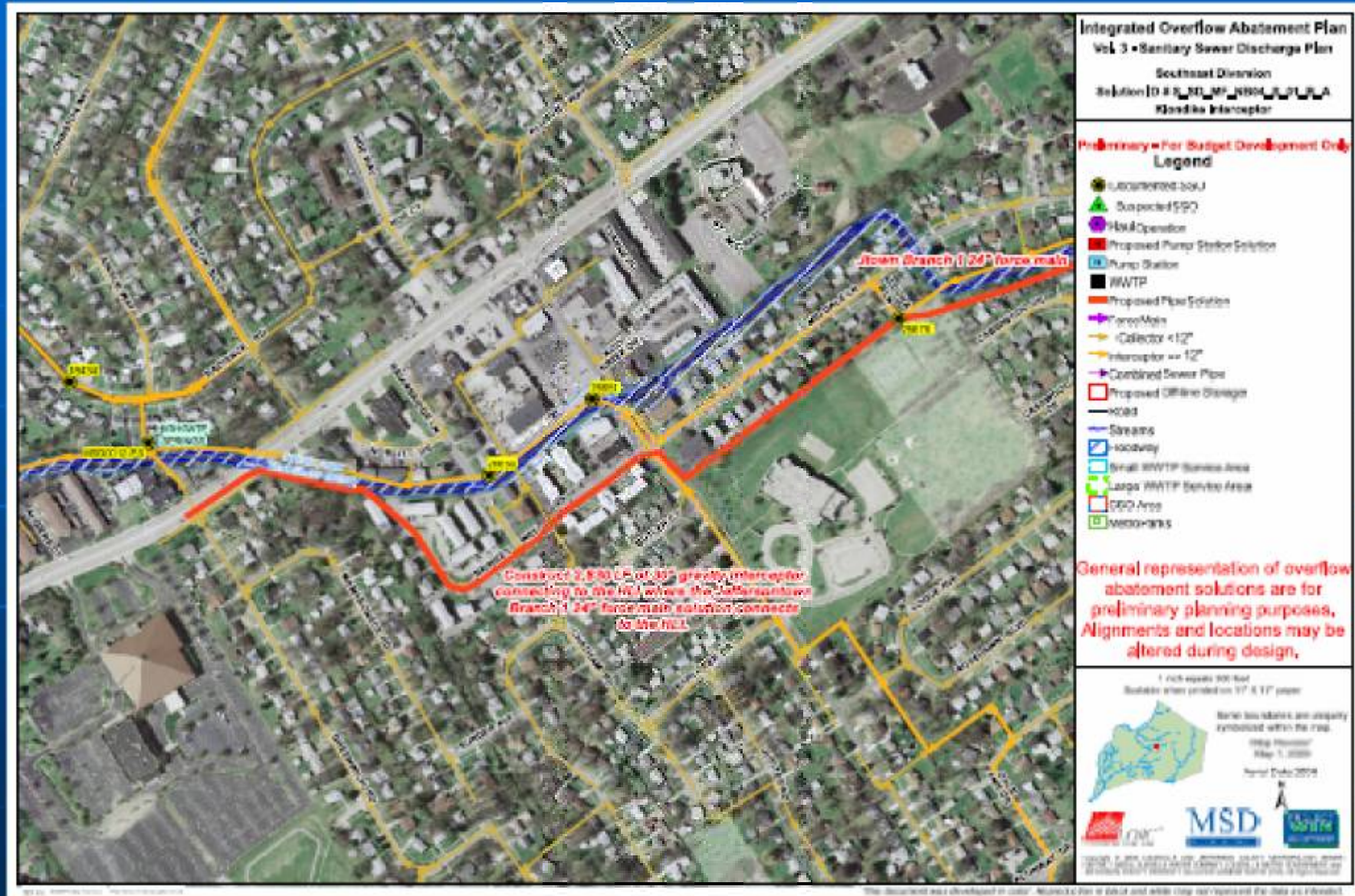
Densely populated neighborhoods, utilities, crossing a four-lane highway, Major blue line stream crossing, close proximity of monitoring wells, fully matured trees.

Construction Cost: \$1.5 million





# Klondike Interceptor





**State:**

Ohio

**Agency:**

Metropolitan Sewer  
District

**Dates:**

2011 - Ongoing

**Type of Project:**

Sanitary Sewer –  
Wastewater  
Treatment Plant

**Length:**

N/A

**Estimated**

**Construction Cost:**  
N/A

**Type of****Improvement:**

Reliability and  
Service Upgrades

**Project****Management:**

Project Manager -  
Vinay K. Polepalli,  
PE, PMP

**Polk Run Wastewater Treatment Plant, Cincinnati, OH**

Mr. Polepalli worked on the project as a Project Manager. He was responsible for the overall deliverables of the project. Global is a sub-consultant to Brown and Caldwell Inc.

**Project Scope:**

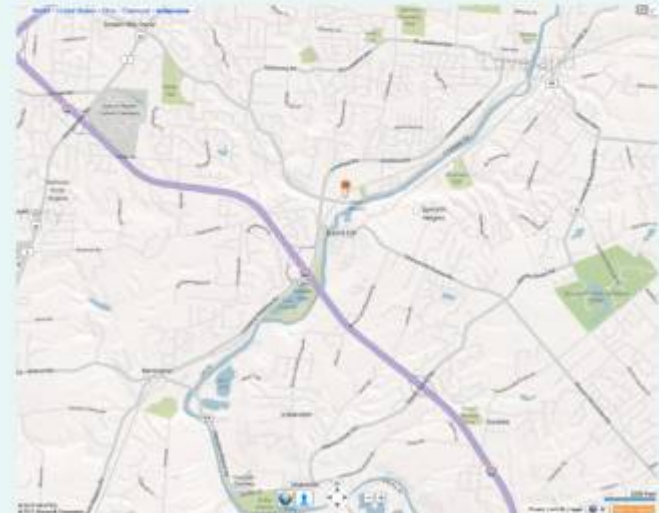
Global was responsible for conducting studies on existing secondary clarifiers, plant drainage system, non-potable water and RAS/WAS pumping system.

Global was responsible for the following tasks:

- Prepare existing conditions document
- Prepare Feasibility and Alternative Analysis Document
- Prepare Preliminary Engineering Report

**Critical Design Elements:**

Secondary Clarifiers, Plant Drainage System, RAS/WAS pumping system, Non-Potable Water



**State:**  
Kentucky

**Agency:**  
Metropolitan Sewer  
District

**Dates:**  
2010 - Ongoing

**Type of Project:**  
Sanitary Sewer

**Length:**  
1.0 Miles (Approx)

**Estimated  
Construction Cost:**  
\$2 million

**Type of  
Improvement:**  
CSO/SSO

**Project  
Management:**  
Project Manager -  
Vinay K. Polepalli,  
PE, PMP

### **Chenoweth Run Interceptor Section 1 and Section 2, Louisville, Kentucky**

Mr. Polepalli worked on the project as a Project Manager. He was responsible for the overall deliverables of the project.

#### **Project Scope:**

##### **Section 1:**

Involves in designing a 2,200 LF of 10" gravity sewer interceptor. This 10" line intercepts the sanitary sewer flow at the Berrytown Treatment Plant at the existing influent pump station to the treatment plant. The pump station will be converted to a manhole. Existing Berrytown Treatment Plant will be decommissioned as part of this project. The proposed sewer line crosses a 60" waterline. Extensive coordination with LWC was performed.

##### **Section 2:**

Involves in designing a 4,000 LF of 10" gravity sewer interceptor. As part of this project, existing St. Clair Pump Station and Starview Treatment Plant will be eliminated.

#### **Critical Design Elements:**

Densely populated neighborhoods, utilities, crossing a residential neighborhood, and fully matured trees, Elimination of two existing wastewater treatment plants, pump station, crossing of a blue line stream, and working with neighbors to minimize impacts to their property.





**State:**  
Commonwealth of  
Kentucky

**Agency:**  
Veterans Affairs

**Dates:**  
2009- 2011

**Rural and/or  
Urban:**  
N/A

**Length:**  
N/A

**Estimated  
Construction Cost:**  
\$2 million

**Type of  
Improvement:**  
Emergency Backup  
Water Supply

**Project  
Management:**  
Project Manager -  
Vinay K. Polepalli,  
PE, PMP

**Emergency Water Supply Project, Veterans Affairs Medical Center, Louisville, Kentucky**

Global Solutions team (Global Solutions and HDR, Inc.) was awarded the design consulting services contract by Veterans Affairs to design a backup water supply system in case of disruptions to the Louisville Water Company water supply system. Mr. Polepalli was the project manager for the project.

The purpose of the project was to improve the capacity of the interstate segment and also improve the geometric design of existing interchanges within the project limits to meet the current design and safety standards.

**SCOPE OF WORK:**

Global Solutions team provided feasibility/alternative analysis and design services for an emergency water supply system to replace 100% of water consumption for a four day period in the event Louisville Water Company ("LWC") was unable to supply water to the VAMC-Louisville. LWC is the sole source of water to the VAMC. In the event the LWC can no longer provide water to the VAMC, VA would have to shut down their medical center until water can be provided. Many of the VAMC systems depend on water to include the boiler and chiller plants, the restroom facilities and the kitchen and dining facilities.

Global Solutions team conducted a feasibility study/alternative analysis and presented the results to the VA staff. Preliminary cost estimates were developed as part of the feasibility study/alternative analysis. Global presented the solutions to the VA staff and recommended a solution to address the needs of the VA facility.

VA decided to pursue Global's recommended solution. Based on this decision, Global developed construction plans, detailed cost estimates and specifications.

This solution involved in constructing a 500,000 gallon water tower, which gives VA hospital a four day storage capacity in case of a disruption to the water supply system. The water in the tank constantly turns over as the main water supply is fed into the storage tank and the water is being distributed from the storage tank to the existing distribution system.

This project was constructed in 2011. Construction Cost was \$1,600,000.00.

**State:**  
Kentucky

**Agency:**  
Metropolitan Sewer  
District

**Dates:**  
2009 - 2010

**Type of Project:**  
Sanitary Sewer –  
Wastewater  
Treatment Plant

**Length:**  
N/A

**Estimated  
Construction Cost:**  
N/A

**Type of  
Improvement:**  
Storm Water Pollution  
Prevention Plan

**Project  
Management:**  
Project Manager -  
Vinay K. Polepalli,  
PE, PMP

**Cedar Creek and Hite Creek WWTP SWPPP and BMPs, Louisville, Kentucky**

Mr. Polepalli worked on the project as a Project Manager. He was responsible for the overall deliverables of the project. Global is a sub-consultant to Gresham Smith and Partners Inc.

**Project Scope:**

Global was responsible for working with Gresham Smith and Partners in developing Storm Water Pollution Prevention Plan for Cedar Creek and Hite Creek wastewater treatment plants.

As part of this scope, numerous visits were made to the treatment plants to document the existing conditions of the plant and interview the plant staff to document the current practices at the plant to prevent Storm Water from getting polluted.

**Critical Design Elements:**

Developing Best Management Practice (BMP) document.

# Recent Roadway Projects





# SAMPLE PROJECTS

## Ohio River Bridges Project

### Downtown Crossing

Client: Jacobs Engineering

Project Scope:

Assist Jacobs Engineering with Design Quality Audit, Field Engineering and Document Control responsibilities.

Construction Cost: \$1.3 Billion



# SAMPLE PROJECTS

## Ohio River Bridges Project East End Crossing

Client: Jacobs Engineering

Project Scope:

Assist Jacobs Engineering with roadway design and general field office administration.

Construction Cost: \$1.3 Billion



**State:**  
Commonwealth of  
Kentucky

**Agency:**  
Kentucky  
Transportation  
Cabinet

**Dates:**  
2000- 2002

**Rural and/or  
Urban:**  
Rural

**Length:**  
7.0 Miles (Approx)

**Estimated  
Construction Cost:**  
\$55 million

**Type of  
Improvement:**  
Interstate Widening

**Project  
Management:**  
Project Manager -  
Vinay K. Polepalli,  
PE, PMP

**I-65 SECTION "A" WIDENING PROJECT (MP 64.8 TO MP 71.5) HARDIN, LARUE AND HART COUNTIES, KENTUCKY**

(Mr. Polepalli has worked on the following project as a project manager while he was employed by HMB Consulting Engineers in Kentucky & Indiana)

The purpose of the project was to improve the capacity of the interstate segment and also improve the geometric design of existing interchanges within the project limits to meet the current design and safety standards.

**Existing Conditions:**

Interstate 65 section within the project limits is heavily traveled by trucks and cars alike. Truck traffic accounts for approximately 40% of the total traffic volume and as a result of which the pavement is in considerable distress. Further, capacity analysis of this section of interstate indicated an unacceptable level of service. Investigation of geometric design of existing interchanges revealed that acceleration and deceleration lane lengths are inadequate. Several existing drainage structures were silted up completely.

**Proposed Methodology:**

Phase I Design Services for I-65 widening and reconstruction project began just north of Munfordville interchange (MP 64.8) and ends at Western Kentucky Parkway (MP 91.3) in Elizabethtown. Three alternative typical sections were evaluated and a final typical section was picked based on several factors, such as, cost of construction, right-of-way impacts and impacts to the drainage structures, bridge structures etc. This area of the project being in karst topography, extensive erosion control measures were designed to decontaminate the storm water entering into the sink holes. Special precautions were taken to cap the sinkholes that were affected.

Capacity analysis was performed on the entire length of the project segment to identify the existing level of service and analyze the required capacity for the design year traffic volumes. Two different interchange design alternatives were developed for consideration and an alternative was chosen for a final design. Interchange geometric design sheets were prepared for approval by the central office. Maintenance of traffic was performed on the entire stretch of the project. Preliminary drainage folders were prepared for submittal. Culvert situation sheets were prepared where necessary.



<b>State:</b> Commonwealth of Kentucky	<b>I-75 Interchange - Duncannon Road Widening - Phase II Madison County, Kentucky</b> (Mr. Polepalli has worked on the following project as a project manager while he was employed by HMB Consulting Engineers in Kentucky & Indiana)
<b>Agency:</b> Kentucky Transportation Cabinet	The purpose of the project was to widen existing Duncannon Road from two lanes to four lanes with a depressed median. Several segments of existing Duncannon Road were realigned to meet current design standards. However, the alignment of existing Duncannon Road in the urban section was retained to minimize impacts to the adjacent properties and as well as minimize impacts to environmentally sensitive areas. The project also involved in designing a new interchange with I-75.
<b>Dates:</b> 1998 – 2004	Several horizontal alignments and vertical grades were developed to design the proposed Duncannon Road and provide access to I-75.
<b>Rural and/or Urban:</b> Rural and Urban	Extensive capacity analysis was performed to identify the best Interchange design for Duncannon Road and I-75 interstate in Madison County, Kentucky. Traffic volumes were obtained from Kentucky Transportation Cabinet. Several different preliminary interchange designs were developed and evaluated . Based on several factors an option was selected for detailed design.
<b>Length:</b> 3.5 Miles	A detailed Interchange geometric sheet was prepared depicting the geometric information of various elements of the Interchange design. Detailed development sheets were also produced to show the cross-slope transitions in all the critical areas of the interchange to make sure that a smooth transition occurs.
<b>Estimated Construction Cost:</b> \$30 million	A very high importance was given to the environmentally sensitive areas to eliminate any impacts from the proposed alignment. To achieve this task, extensive coordination between the project team members was encouraged and implemented. Several design elements were tweaked to minimize the impacts to the adjacent environmentally sensitive areas.
<b>Type of Improvement:</b> Widening existing Duncannon Road to Four Lanes with a depressed median.	Drainage analysis was performed and drainage structures were designed to meet the proposed design criteria. Storm sewer drainage system was designed in the urban section of the project and roadside ditches were designed in the rural section to drain water away from the pavement.
<b>Project Management:</b> Project Manager - Vinay K. Polepalli, PE, PMP.	Erosion control plans were developed to minimize the potential silt build up in the natural channels due to the proposed construction. Proposed drainage structures were protected during construction from any silt build up by taking appropriate erosion control measures.

**State:**  
Commonwealth of  
Kentucky

**JEFFERSON BOULEVARD EXTENSION PROJECT – FROM McCawley Road to Poplar Level Road – JEFFERSON COUNTY, KENTUCKY** (Mr. Polepalli has worked on the following project as a project manager while he was employed by HMB Consulting Engineers in Kentucky & Indiana)

**Agency:**  
Jefferson County  
Public Works  
Department

The proposed road extended the existing Jefferson Boulevard from McCawley Road to Poplar Level Road to reduce traffic congestion in the Jefferson Mall area and improved traffic flow.

**Dates:**  
1998 – 2002

The purpose of the new road was to reduce the traffic congestion in the Jefferson Mall area by giving motorists an alternative route. The project included designing two new bridges and three traffic signals at McCawley Road, Fern Valley Road and Poplar Level Road intersections.

**Rural and/or  
Urban:**  
Urban

Final construction plans, specifications and estimates were submitted to Jefferson County Public Works. As part of the project scope, intersections with McCawley Road, Fern Valley Road and Poplar Level Road were designed to meet safety standards and provide adequate capacity to function at a desirable level of service. All the intersections were designed as signalized intersections. Capacity analysis was performed at all these three intersections to determine the required capacity to obtain desirable level of service.

**Length:**  
2.0 Miles  
(approximately)

**Estimated  
Construction Cost:**  
\$12 million

**Type of  
Improvement:**  
Extend existing  
Jefferson Boulevard  
from McCawley  
Road to Poplar Level  
Road

Signal layout sheets were prepared to meet City of Louisville specifications. Extensive coordination with Jefferson County and District 5 office was also performed to develop signal layout sheets. Extensive drainage analysis was performed at all these intersections to drain the water as well as design drainage structures that meet the proposed design criteria. Right of way impacts were documented at these intersections.

**Project  
Management:**  
Project Engineer -  
Vinay K. Polepalli,  
PE, PMP

The project was constructed in 2004 and various local agencies, residents and business community were pleased with the outcome of the project.



<b>State:</b> Commonwealth of Kentucky	<b>Duncannon Road Widening - Phase II Madison County, Kentucky</b> (Mr. Polepalli has worked on the following project as a project manager while he was employed by HMB Consulting Engineers in Kentucky & Indiana)
<b>Agency:</b> Kentucky Transportation Cabinet	The purpose of the project was to widen existing Duncannon Road from two lanes to four lanes with a depressed median. Several segments of existing Duncannon Road were realigned to meet current design standards. However the alignment of existing Duncannon Road in the urban section was retained to minimize impacts to the adjacent properties and as well as minimize impacts to environmentally sensitive areas. The project also involved in designing a new interchange with I-75. The intent of the project was to provide an access to I-75 from Duncannon Road.
<b>Dates:</b> 1998 – 2004	Several horizontal alignments and vertical grades were developed to design the proposed Duncannon Road and provide access to I-75. Several entrances to Duncannon Road were improved and several intersections were realigned to improve safety and access to the proposed alignment.
<b>Rural and/or Urban:</b> Rural and Urban	A very high importance was given to the environmentally sensitive areas to eliminate any impacts from the proposed alignment. To achieve this task, extensive coordination between the project team members was encouraged and implemented. Several design elements were tweaked to minimize the impacts to the adjacent environmentally sensitive areas.
<b>Length:</b> 3.5 Miles	
<b>Estimated Construction Cost:</b> \$30 million	Drainage analysis was performed and drainage structures were designed to meet the proposed design criteria. Storm sewer drainage system was designed in the urban section of the project and roadside ditches were designed in the rural section to drain water away from the pavement.
<b>Type of Improvement:</b> Widening existing Duncannon Road to Four Lanes with a depressed median.	Extensive utility coordination was performed to identify all the existing utilities and coordinate any future plans or ongoing construction with utility companies in the vicinity of the project.  Erosion control plans were developed to minimize the potential silt build up in the natural channels due to the proposed construction. Proposed drainage structures were protected during construction from any silt build up by taking appropriate erosion control measures.
<b>Project Management:</b> Project Manager - Vinay K. Polepalli, PE, PMP	Capacity analysis was performed at various intersections as well as on various segments of Duncannon Road to study the existing Level of Service as well as predict the future level of service based on the traffic numbers provided by the state. Left turn or Right turn storage lanes were designed at various intersections to improve the level of service.  Coordination with railroad authorities was performed to locate the bridge piers to ensure appropriate horizontal & vertical clearances for rail traffic.



<b>State:</b> Commonwealth of Kentucky	<b>CENTRAL AVENUE PROJECT Jefferson County, Louisville, Kentucky</b> (Mr. Polepalli has worked on the following project as a project manager while he was employed by HMB Consulting Engineers in Kentucky & Indiana)
<b>Agency:</b> City of Louisville	The purpose of the project was to provide grand entrance/access to world famous Churchill Downs and improve traffic flow near Churchill Downs area. To obtain this goal Central Avenue was proposed to extend over existing railroad to intersect Crittenden Drive.
<b>Dates:</b> 1998 – 2001	Existing Central Avenue was a busy and congested collector street without a proper access to any major arterial highway. Central Avenue provides access to the world famous Churchill Downs. Existing intersections were not meeting current design standards.
<b>Rural and/or Urban:</b> Urban	The project began at the proposed intersection with the Crittenden Drive and ended at the existing intersection with Taylor Blvd. Several intersections along the Central Avenue were redesigned to meet design standards and improve the safety and level of service.
<b>Length:</b> 2.5 Miles	Existing traffic volumes were obtained from KYTC and future traffic volumes were calculated based on the growth factors to obtain design year traffic volumes. Capacity analysis was then performed on the design year traffic volumes to determine the required capacity at all the intersections along the project length. Several of these intersections were signalized. Signal layout sheets for all these intersections were prepared and extensive coordination with City of Louisville was performed to develop layout sheets that met City standards.
<b>Estimated Construction Cost:</b> \$15 million	
<b>Type of Improvement:</b> Roadway widening and Roadway extension	Utility coordination was performed to identify all the existing underground and above ground utilities to minimize any potential conflicts with various design elements of the project. Storm Sewer pipe network was designed based on this utility coordination to minimize any potential conflicts with various utilities underground. Extensive drainage analysis was performed at all these intersections to drain the water as well as design drainage structures that meet the proposed design criteria. Coordination with several local agencies was performed to improve the communications and as well address concerns of the agencies during design stages of the project. Coordination with railroad authorities was performed to locate the bridge piers and make sure that enough clearances, both horizontal and vertical, were provided for a smooth passage of rail traffic. Right of way plans were prepared to acquire necessary right of way. Maintenance of traffic was accomplished in several phases.
<b>Project Management:</b> Project Engineer Vinay K. Polepalli, PE, PMP	The project was constructed in three different sections. This project was completed in 2000 and has impressed local officials, business owners, and residents in Louisville, Kentucky.



**State:**  
Commonwealth of  
Kentucky

**Agency:**  
Kentucky  
Transportation  
Cabinet

**Dates:**  
2005-2011

**Rural and/or  
Urban:**  
Urban

**Length:**  
1.0 Miles (Approx)

**Estimated  
Construction Cost:**  
\$350 million

**Type of  
Improvement:**  
New Bridge

**Project  
Management:**  
Global Solutions  
Project Manager -  
Vinay K. Polepalli,  
PE, PMP

## **LOUISVILLE SOUTHERN INDIANA OHIO RIVER BRIDGES PROJECT – Section 2, I-65 Bridge, JEFFERSON COUNTY, KENTUCKY**

Mr. Polepalli served as the project manager for Global Solutions scope of work. The purpose of the project was to design a new long span bridge across Ohio River. Michael Baker Jr. Inc. was the prime consulting firm. Global provided following services, Project Controls, Maintenance of Traffic, Traffic Engineering – Signing Plans and Striping Plans, Bridge Hydraulic Analysis

**Project Controls.** Provided the following fiscal and schedule management controls for the project in accordance with the specific requirements of the GEC's Project Control Procedures.

- Expand Initial Cost Projection & Schedule.
- Provide Monthly Update to Cost & Schedule
- Acquire Monthly Schedule Updates.
- Revise Primavera Schedule
- Monthly Schedule Comparison Report

### **Maintenance of Traffic**

- Develop MOT concepts and reports
- Develop MOT plans, profiles and cross-sections

### **Signing and Striping Plans**

- Develop signing plans for the proposed bridge
- Develop striping plans for the proposed bridge

### **Bridge Hydraulic Analysis**

- Developed and Updated Hydraulic Model – HEC-RAS was used to accomplish this task

<p><b>State:</b> Commonwealth of Kentucky</p> <p><b>Agency:</b> City of Louisville</p> <p><b>Dates:</b> 2000 – 2002</p> <p><b>Rural and/or Urban:</b> Urban</p> <p><b>Length:</b> 0.75 Miles</p> <p><b>Estimated Construction Cost:</b> \$3.5 million</p> <p><b>Type of Improvement:</b> Roadway widening and Roadway extension</p> <p><b>Project Management:</b> Project Manager Vinay K. Polepalli, PE, PMP</p>	<p><b>2<sup>nd</sup> Street Widening – Phase II, Louisville, Kentucky</b> (Mr. Polepalli has worked on the following project as a project manager while he was employed by HMB Consulting Engineers in Kentucky &amp; Indiana)</p> <p><b>Project Purpose and Need:</b> To improve the traffic flow in the network of streets in downtown Louisville, KY and also to give a grand entrance into the city from Indiana.</p> <p><b>Project Details:</b> 2<sup>nd</sup> Street Phase II Widening Project was undertaken as a continuation of Phase I of the 2<sup>nd</sup> Street Project. The intent of widening 2<sup>nd</sup> Street was to present a grand entrance into downtown Louisville coming from the state of Indiana off the 2<sup>nd</sup> Street Bridge. This widening was not only undertaken to improve the entrance into the City but also to improve the traffic flow within the downtown street network.</p> <p>It was Mr. Polepalli's idea to extend the 2<sup>nd</sup> Street to Broadway Street during the Phase II of the project. Initially City of Louisville had different plans for the proposed termini for two-way 2<sup>nd</sup> Street segment. When the idea was presented to the City to extend the 2<sup>nd</sup> Street to Broadway Street, City liked the idea and was convinced to extend the project to this location which in turn resulted in scope change and increased fee on the project.</p> <p>Mr. Polepalli in his role as a Project Manager for his prior employer was responsible for the overall project delivery (design, schedules, budgets etc) of the project and also for the development of bid proposal documents to solicit bids from the construction companies.</p> <p>Following were some of the key elements of the project:</p> <ul style="list-style-type: none"> <li>•Aesthetic roadway geometry that blends in with the existing topography</li> <li>•Storm Sewer Drainage</li> <li>•Extensive Utility Coordination including Vacuum Excavations</li> <li>•Traffic Capacity Analysis</li> <li>•Traffic Signal Design</li> <li>•Landscaping</li> <li>•Streetscaping</li> <li>•Bid Proposal documents</li> </ul>
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**State:**  
Commonwealth of  
Kentucky

**Agency:**  
Oldham County  
Economic  
Development

**Dates:**  
1999 – 2001

**Rural and/or  
Urban:**  
Rural and Urban

**Length:**  
3.2 Miles

**Estimated  
Construction Cost:**  
\$5 million

**Type of  
Improvement:**  
Design access road  
and improve the  
existing local road  
approach to this  
business park access  
road.

**Project  
Management:**  
Project Manager -  
Vinay K. Polepalli,  
PE, PMP

## **OLDHAM COUNTY BUSINESS PARKWAY – Phase II**

### **Oldham County, Kentucky**

(Mr. Polepalli has worked on the following project as a project manager while he was employed by HMB Consulting Engineers in Kentucky & Indiana)

The purpose of the project was to design a business parkway through a pre-identified corridor. The intent of the project was to provide access to a vast area of land adjacent to I-71 and spur economic development in the county.

Horizontal alignments and vertical grades were developed to design the proposed business parkway and provide access to the adjacent land. Potential entrances to several tracts of land were identified based on the proposed design and existing topography of the surrounding land.

Several intersections with existing roads such as KY 393, KY 53, Parker Drive, Button Lane were designed to provide safe access to proposed Oldham County Business Parkway. Sight distance, left turn and right turn lanes, traffic signs, striping, utility pole locations were closely studied and intersections were designed to provide safe access to the proposed intersection.

A very high importance was given to the client coordination due to the fact that the client was dealing with potential businesses to attract them to the proposed industrial park - for which this road was designed. The design elements were tweaked, if necessary, to accommodate the potential business establishments in the business park.

Drainage analyses were performed to drain the water as well as design drainage structures that meet the proposed design criteria. Ponds that were impacted as a result of this alignment were graded to blend in with the proposed line and grade.

Coordination with District 5 was performed to obtain encroachment permit. Curb and gutter section was designed for the approach road to this business parkway. Utility coordination was performed to identify the existing utilities and communications were established with the utility agencies if a utility relocation was necessary. Erosion control plans were developed to minimize the potential silt build up in the natural channels due to the proposed construction. Proposed drainage structures were protected during construction from any silt build up by taking appropriate erosion control measures.

The project was constructed in 2002 and various local agencies, residents and business community were pleased with the outcome of the project.

# Why Global is Your Partner of Choice

- ❑ Our Clients' Repeat Business Says a Lot!
  - Clients have given positive feedback on our performance, dependability, professionalism, quality and responsiveness
- ❑ Please Contact our Clients for References:
  - Cheryl Jones, Jacobs Engineering, Louisville, KY
  - Tyler Yorgason, Jacobs Engineering, Jeffersonville, IN
  - James Williams, Michael Baker Jr., Louisville, KY
  - Steve Emly, MSD Louisville, KY
  - Joey Ashby, MSD Louisville, KY





# Why Choose Global?

- Global Solutions ability, willingness and desire to address our clients' needs
- Senior-level engineering experience on Global's staff will ensure thorough understanding of clients' needs and requirements, operational procedures and expectations
- Commitment from upper management to provide quality services and build a long-term relationship
- Available capacity to work on the tasks assigned to Global
- Successful working relationships with several large firms



# Questions & Answers

