



# Corporate Qualifications Corporate Qualifications CORPORATE QUALIFICATIONS

## PANGEA

**Many Solutions** 

**One Source** 

# Corporate Qualifications Corporate Qualifications INTRODUCTION



To Our Customers and Colleagues

Since our founding in 1994 our mission continues to guide us -

"Pangea will safely provide quality construction,

environmental and engineering services

with professionalism to achieve

the highest customer satisfaction."

We strive to provide these support services at a reasonable profit, competitive cost and on-time delivery to reach our goal of customer satisfaction.

It is the people of Pangea who apply the tools and concepts of quality to meet customer's needs. Pangea hires diverse, capable and experienced people and enables them through training and support to solve complex challenges.

Let us show you how our performance on your next construction or engineering project will make the beginning of a successful relationship.

Michael Zambrana Founder and President

# Corporate Qualifications Corporate Qualifications INTRODUCTION



#### **OUR HISTORY**

Pangea, Inc. was established in 1994 to support the U.S. Department of Energy's (DOE) clean-up mission at the Weldon Spring Remedial Action Site near St. Louis, Missouri. Pangea was awarded an open solicitation to operate and maintain seven wastewater treatment plants. Pangea has since grown into a strong experienced staff of over 30 professionals including senior environmental managers, scientists, professional engineers, project managers, superintendents, and technicians who provide Civil Construction, Facility Construction, Environmental Remediation, Environmental Health and Safety Services and Operations and Maintenance Services to a broad variety of customers, both public and private, throughout the United States.



In early 2007, Pangea added a full line of Civil and Structural Engineering and Professional Surveying Services by acquiring an established local engineering company. **Pangea** 



Engineering and Surveying, LLC., a wholly owned subsidiary, has a veteran staff from the engineering and surveying fields able to assist the Pangea team and serves client's needs in the commercial, federal, municipal and public work arenas.

The corporate headquarters of Pangea, Inc. is located in St. Louis, Missouri and O'Fallon, Illinois.

2604 South Jefferson Avenue St. Louis, MO 63118

8 Eagle Center O'Fallon, IL 62269 Pangea is a certified Small Business Administration firm. Pangea is also a self-certified Small Disadvantaged Business (SDB), a Disadvantaged Business Enterprise (DBE) and a Minority Owned Business Enterprise (MBE).



Pangea has developed into a nationally known contractor and has managed multidisciplinary projects in remote locations as well as highly populated urban settings, using both in-house and subcontracted resources to meet scope, schedule and cost objectives. The veteran Pangea staff has a history of minimizing costs through innovative approaches, regulatory understanding and partnering with the client. Pangea has worked on private industry sites and large federal projects in single and multiple locations.

### orporate Qualifications Corporate Qualifications INTRODUCTION



#### **OUR HISTORY**

Established in 1994, Pangea Group is an environmental restoration, waste management, construction, operations, and environmental health and safety services provider committed to providing nationwide clients with the best performance and services in the industry.

Pangea's project managers, superintendents, and technical support staff average 20 years of experience in construction remediation and waste management. Much of this experience has been gathered with the largest and most respected names in government contracting and private industry clients. Pangea's staff has completed more than 500 projects form coast to coast. Pangea has proven to its clients to be a reliable solution with innovative approaches to their most complex challenges. Some of Pangea's valued clients are represented here...











































Whether a project is Firm-Fixed Price or Cost Reimbursable, Pangea has the professional staff and support systems to deliver a project on time and within budget

# Corporate Qualifications Corporate Qualifications SAFETY



#### PANGEA SAFETY CULTURE

Pangea's Safety Culture provides an unyielding commitment to the safety of its employees and those of its customers and subcontractors. Pangea's comprehensive Health and Safety Program has a major emphasis on personnel experience, hazard analysis, use of standard operating procedures, and continuous job site training. It incorporates state-of-the-art work practices and engineering control measures designed to minimize or eliminate job site hazards.

CAUTION CAUTION CAUTION CAUTION CAUTION CAUTION CAUTION

Pangea's overall safety record has been exceptional since the company's inception in 1994. While Pangea has grown substantially, the company's EMR rating has consistently been in the range of 0.82-0.94. Pangea's goal is to achieve zero accident performance for all projects. Attaining such a level of performance requires continuous management involvement in project planning and implementation of programs such as:

- Integrated Development of Site Health and Safety Programs
- Effective Safety Management
- Job Specific Activity Hazard Assessment (AHA)
- Process Utilization
- Subcontractor Safety Coordination

"I want to extend my sincere appreciation and congratulate you for your commendable attention to safety at your Naval Facilities Engineering Command, Midwest (NAVFAC Midwest) construction project. Your absolute commitment and adherence to safety is exemplified by your admirable safety record. A safe work environment doesn't "just happen". It takes a dedicated effort by your staff to emphasize safe work practices and procedures every day."

~R. J. Gibbs Captain, Civil Engineer Corp U.S. Navy Commanding Officer

#### **Recent Milestones:**

- Pangea experienced zero recordable incidents and zero lost time injury accidents in 2007, 2008 and 2009.
- Pangea has had only one recordable incident in the last 4 years
- Pangea was awarded the 2009 Ameren Contractor Eagle Award and the 2007, 2008 and 2009 Ameren Certificate of Safety Excellence



Pangea was accepted into the St. Louis Construction Industry "PRIDE" Partnership Program, a consortium of construction industry management and labor organizations and the St. Louis OSHA office in May 2001. Pangea is one of a select few contractors who have met the criteria for acceptance into the PRIDE-OSHA Program. In addition, Pangea has been awarded multiple Excellence in Safety Awards from the St. Louis Associated General Contractors (AGC) for attainment of zero lost workday incidents in a calendar year.

# Corporate Qualifications Corporate Qualifications QUALITY



#### PANGEA QUALITY CULTURE

The emphasis on quality is built into Pangea's culture, training and manuals. The quality program described in Pangea's Quality Assurance Program Plan (QAPP) applies to all work activities performed by Pangea. The requirements of the QAPP are applied to oversee suppliers and subcontractors who perform work for Pangea to ensure that all work activities are executed in a manner that provides the client with an end product that meets safety and quality expectations.



#### **Continuous Quality Improvement Program (CIP)**

Pangea Management promotes an atmosphere of quality that recognizes the importance of teamwork and focuses on continuous quality improvement and problem prevention. This atmosphere promotes a no-fault attitude encouraging identification of items and processes that deviate from their intended purpose. It also fosters the identification and recommendation of ideas for increasing efficiency and upgrading quality in areas where improvements can be made.

Pangea has established several formal methods to achieve quality improvement. These methods include implementation of our formal continuous Quality Improvement Program (CIP), identification, control and resolution of unsatisfactory items, corrective actions, trend analyses, peer reviews, value engineering, and audits.



#### **Quality Assurance/Quality Control Program**

Pangea adheres to a Corporate Quality Assurance Program Plan (QAPP). The QAPP provides Pangea and the client with a sound qual-

ity baseline from which to execute the project work. The QAPP documents the Quality Assurance and Quality Control (QA/QC) practices of Pangea.

"Enclosed is the Outstanding Performance Evaluation for your contract ... Quality, timely performance, effectiveness of management and compliance with safety were excellent ..."

~Robin Woodruff/Don Peterson U.S. Army Corps of Engineers-Louisville District

#### Construction QC

Pangea performs oversight of work and conducts meetings with staff using a process which incorporates the USACE or DOE QC

process to manage the QC requirements with respect to each definable feature of work and to identify potential deviations or deficiencies early to prevent rework or major cost impacts.

# Corporate Qualifications Corporate Qualifications RECOGNIZED PERFORMANCE



#### **CLIENT SATISFACTION**

There is no stronger indicator of performance than client satisfaction. Clients have consistently rated Pangea's performance high and prove their satisfaction with repeat business. Below are several endorsements on projects and programs that have proven Pangea's commitment to delivering quality work on schedule and safety.

2009 SBA Region VII Prime Contractor of the Year

2008 Hispanic Businessman of the Year

2007 SBA Region VII Subcontractor of the Year



"Pangea's performance at the Crab Orchard, Site 36 WWTP Remediation project can best be summarized as that of an ideal contractor. Pangea's performance saved time and resulted in cost saving. The spirit of cooperation and positive attitude pervaded all aspects of the project."

Margaret Lake, Senior Chemist U.S. Department of the Interior, Bureau of Reclamation

"In particular, I appreciate your ability and willingness to respond to our RFP's and project requirements quickly and accurately. Some of the projects where you have excelled have been both schedule-accelerated and high profile. It is obvious that you have developed a culture within your ream building around client satisfaction, particularly with federal client. Your ability to work through issues at the field level is evidenced by a lack of Pangea-generated change order requests, and your record of completing projects on or ahead of schedule."

Dennis Toenjes, Chief of Planning Scott Air Force Base

"Throughout the project your management team responded to all challenges with innovative solutions. Your ability to manage information, use common sense approaches, and provide feedback proved to be instrumental."

Major Keith Dupont, USACE Deputy Area Engineer Fort Leonard Wood, MO

"Pangea personnel exhibited professionalism and dedication to success in addressing the many challenges associated with the completion of this complex project, including aggressive schedules, and inflexible deadlines, weather delays, and coordination of efforts between numerous contractor and government entities."

Glenford A. Newtown, REM Project Engineer, Department of Energy

"The Corps of Engineers, Louisville District would like to take this opportunity to express our appreciation for the work performed on this contract. Quality, timely performance, effectiveness of management and compliance with safety standards were excellent on the project. The Corps of Engineers, Louisville District would like to express our appreciation for the outstanding work performed."

Don Peterson, Resident Engineer U.S. Army Engineer District, Louisville Project Engineer, Department of Energy

# Corporate Qualifications Corporate Qualifications FACILITY CONSTRUCTION



**O**UR **HISTORY** 



Pangea's business approach to deliver projects is based on partnering with customers, subcontractors, and other program stakeholders. This approach has proven successful on several multi-task programs and has helped develop a reputation for saving clients money and delivering projects on schedule. Pangea has successfully served the Air National Guard, the State of Missouri, BJC, and universities in numerous construction projects.

Pangea has expertise in constructing:

- Permanent Commercial & Industrial Buildings
- Temporary Facilities
- Modular Construction
- Perimeter and Radiation Security
- Rehabilitation & Renovations
- Tenant Finish

Pangea has completed Design/Build and Bid/Build projects including warehouses, flight training facilities, offices, pre-manufactured buildings and anti-terrorism/force protection.

Pangea's experience includes working in varied locations such as; clean sites, contaminated sites, secure sites, high profile sites, remote locations, urban settings, and high-traffic operating healthcare environments.

"The 375th Civil Engineering Squadron at Scott AFB recognizes and appreciates the exceptional performance of your construction team in the execution of several projects for the 375th. Some of the projects where you have excelled have been both schedule accelerated and high profile."

~ Dennis Toenjes, Chief of Planning Department of the Air Force, 375th Airlift Wing

Our goal is to plan the work with input from all project stakeholders to minimize surprises. Communication is the key to effective management, and achieving client satisfaction by discussing the many project specific issues that impact each unique project. This ensures a quality project delivered safely, on time, and within budget.

### **FACILITY CONSTRUCTION**



PANGEA GROUP

**Project Details** 

Title: Design/Build Stockton Administration

**Building** 

Contract No. **W912DQ-04-D-009** 

Client: US Army Corps of Engineers, Kansas City

District

Location: Stockton Lake, Missouri

Contract Amount: \$1,238,054
Contract Type: Firm Fixed Price
Start Date: 5/26/2004
End Date: 8/15/2005

Reference

Jesse Vance, Contracting Officer Representative

USACE Fort Leonard Area Office 1334 1st Street, Bldg. 2204 Fort Leonard Wood, MO 65473

573-596-0081

jesse.w.vance@nwk02.usace.army.mil

Pangea performed the design-build Stockton Lake Administration Building project at Stockton Lake, MO. This was an 8,000 ft<sup>2</sup> building to house the Stockton Lake Area Office of the U.S. Army Corps of Engineers and the Senator Kit Bond Information Center.

The Stockton Administration Building consisted of a

totally wood structure of approximately 8.000 ft<sup>2</sup> on a concrete slab on grade. Walls were wooden 2"x6"'s with a drywall interior and a brick veneer exterior. cause the original building was destroyed during a tornado in 2003, this structure was constructed with a 10" thick masonry concrete storm shelter/vault with a concrete roof and a steel door designed to withstand winds up to 210 mph.





Roofing material was a commercial grade standing seam metal roof system. The lobby area had a 32 foot high ceiling constructed out of arched glue lam beams covered with exposed tongue and grooved oak decking spanning 28'. The west end of the building contained 11 offices for the Operations Manager, Conservation Agents, Water Patrol and other Administrative personnel. Also included were employee rest rooms (with showers), a mail room and a lunch eating area. The east end contained a public kitchen, rest rooms, and a conference area large enough to hold up to 100 individuals with all the modern audio visual amenities. All offices, hallways, kitchen and conference area was carpeted with

2 x 2 carpet tiles. The lobby and rest room had ceramic flooring. The mechanical system consisted of a two zone heating and cooling units and heat pumps. Exterior card reader accesses were placed all entry doors along with a new security monitoring system.

### **FACILITY CONSTRUCTION**



PANGEA GROUP

**Project Details** 

Title: Repair Convert Hanger 224 Phase 1 &

Phase 2

Contract No. **W9127S-07-C-6015** 

Client: US Army Corps of Engineers, Little Rock

District

Location: Little Rock Air Force Base, AR

Contract Amount: \$1,075,733
Contract Type: Firm Fixed Price
Start Date: 3/28/2008
End Date: 7/30/2009

Reference
Dianne Priddy

US Army Corps of Engineers, Little Rock District

700 W. Capital Ave., Room 7315

Little Rock, AR 72201 501-987-7679

dianne.priddy@littlerock.af.mil

Pangea was the Prime Contractor for the Convert Hanger 224-Phase I/II project. This project was one of six projects with the Little Rock

District of the U.S. Army Corps of Engineers (USACE) awarded to Pangea under our MATOC contract with the District in late September 2007.

The design-build renovation of Hanger 224 at Little Rock Air Force Base was performed to convert the existing flight line hanger to a more functional work, storage, and office facility. The task or-

der included the demolition and reconfiguration of the building's structural system, alterations of interior building layout, installation of



new doors, repairs to the interior walls, and construction of new, conditioned office space, restrooms, and break area. The electrical and fire-alarm systems were reconfigured and expanded to support the new interior layout and function. New exterior roof and wall coatings and major alterations to the interior floor were applied to prevent the infiltration of rain and storm water that had historically been problematic.



### **FACILITY CONSTRUCTION**





**Project Details** 

Title: Remove and Rebuild Guard House, B455,

Main Gate

Contract No. **W9127S-07-C-6012** 

Client: US Army Corps of Engineers, Little Rock

District

Location: Red River Army Depot, Texarkana, TX

Contract Amount: \$1,025,953

Contract Type:

Start Date: 9/7/2007 End Date: 3/30/2009

Reference

Brandon Driscoll

US Army Corps of Engineers, Little Rock District

700 W. Capitol Ave., Room 7315

Little Rock. AR 72201 903-334-4304

Brandon.driscoll@us.army.mil

The Red River Army Depot (RRAD) Main Gate Access Control Point (ACP) Guardhouse Redesign consisted of designing and building an Access Control Zone within RRAD's Main Gate Access

Control Point (ACP) in accordance with project scope, regulatory mandates, Army ACP Standard Definitive Design, Surface Deployment and Distribution Command Transportation Engineering Agency (SDDCTEA), Traffic and Safety Engineering for Better Entry Control Facilities, and the FHWA's Manual on Uniform Traffic Control Devices (MUTCD). This project focused primarily on the "access control zone"

within the ACP Corridor, which encompasses traffic management and infrastructure elements that facilitate a safe and efficient access control process. The project involved the demolition of the existing



Guard House and concrete traffic islands. The work included:

- Installation of two (2) Level-3 (UL 752 Ballistic Protection Rating) Guard Booths, equipped with left and right access doors, on newly constructed raised concrete traffic islands
- Installation of a new Level-3 (UL 752 Ballistic Protection Rating) Gate House
- Impact Attenuators (8" concrete filled surface mount bollards) at the end of the Guard Booth and Gate House traffic islands
- Designing and constructing DS-22 security type permanent bollards in front of the two

Guard Booths and in front of the new Gate

- Electrical power and control wiring to each Guard Booth and Gate House to accommodate lighting, CCTV, Duress Alarm, Barrier "Emergency Fast Operate" (EFO) switch, and a remote generator enunciator in the Gate House
- Design and construction of a new inbound search lane and search area complete with canopy matching exist-

ing access control zone canopies. This area required grading, installation of base materials, approximately 6,720 square feet of new asphalt, and electrical utility installation.



### **FACILITY CONSTRUCTION**





**Project Details** 

Contract No.

Title: Building S797 Renovation and Multiple

Building Demolition N62467-03-D-0291

Client: Naval Facilities Engineering Command

Midwest

Location: Naval Support Activity Mid-South,

Millington, TN

Contract Amount: \$1,672,820

Contract Type:

Start Date:

End Date: 12/8/2008

Reference

Malcolm Griffin

Naval Facilities Engineering Command Midwest

Public Works Department Mid-South

5722 Integrity Drive Millington, TN 38054 901-874-7751

malcolm.griffin@navy.mil

Pangea was contracted by the U.S. Navy, under a Design/Build Multiple Award Construction Contract (MACC), to renovate Craft Tech Building S797 and provide demolition services at multiple

sites at the Naval Support Activity Mid-South in Millington, TN. The Naval Facility at Millington, TN was a flourishing Air Mechanic Training Facility following World War I and has been slowly consolidating services and buildings since 1995.

Pangea's contract consisted of the demolition of 18 facilities and ancillary structures of varying size and complexity within the Naval

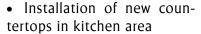
Base campus and the interior and exterior renovations of Building \$797. The demolition portion required the abatement of Asbestos Containing



Material (ACM), Lead Containing/Based Paints (LCP/LBP), and Mercury containing electrical components. The scope of work included the proper handling, tracking, and disposal of these materials. This contract also included four options for the renovations of building S797 and one option for the multiple building demolition base bid.

Details of the renovation activities at Building S797 include the following:

- Selective demolition of flooring, cove base, block walls, acoustical ceilings, drywall ceilings, countertops, and existing dust collection system
- Creation of new offices, storage rooms, and workshop areas



- Rework of existing electrical master switches and relocation of phone/data main hub to one central office
- Installation of new dust collection system and associated duct work in shop area
- Installation of new doors and frames with new door hardware
- Installation of new flooring in new offices and repair of affected shop area floors
- Addition of access doors at abandoned sink locations and the capping of existing plumbing

(Continued on page 2)



### ENVIRONMENTAL REMEDIATION

DEMOLITION, TREATMENT, REMOVAL AND TRANSPORTATION SERVICES

within the existing block walls

- Addition of a new eye-wash station in the new shop area
- Disassembly and relocation of existing heavy wood working machinery, from buildings that were subsequently demolished, into locations with Building S797. The machines were secured to the new shop floor by Pangea for stabilization and to prevent toppling of the heavy steel equipment is the event of an earthquake, due to the proximity of the facility to the New Madrid Fault
- Evaluation and overhaul of the existing sprinkler system, as needed to achieve one hundred percent coverage
- Installation of new acoustic ceilings in hallways and patching of existing drywall ceilings
- Painting of areas affected by new construction
- Excavation and installation of a new driveway from existing parking lot to new fenced gravel area at rear of building
- Removal of existing fence and replacement of such with new vinyl coated chain link fence/ gates
- Removal of six inches of topsoil from the space within fenced area and restoration of area with a weed control fabric and six inches of crushed limestone
- Cut out of existing brick control joints and resealing of such
- Raising of existing downspouts and increased grade at downspout locations
- Planting of new trees around existing building and installation of new gravel lot
- Removal and replacement of wall hangings after patching and painting existing walls in hallways, the MWR Electronics & TV Shop, and the Seabee's Shop and Storage Areas
- Removal and replacement of acoustic ceiling tiles in the MWR office two area

Pangea and our subcontractor installed a new addressable fire alarm panel, annunciator, and upgraded the Vision 21 panel and antenna in Option

#3 of the contract. Option #4 included the installation of a combined mass notification system in Building S797 that is tied to the existing facility fire alarm system.



The scope of work for the demolition base bid included the demolition of Buildings 202, 220, 223, 224, 225, 360, 1674, 1723, 1724, 756, 277, 278, 246, 891, 892, 893, 1829, & 343. Details of the demolition activities include the following:

- Site foot print reduction of 35,970 sq. ft. of under-utilized steel, masonry, and wood building structures
- Characterization, removal, segregation and proper disposal of lead containing materials, asbestos and mercury devices
- Re-routing and termination of underground utilities required for safe demolition performance
- Conducting OSHA required engineering evaluations for safe demolition determinations
- Removal, segregation and proper disposal of all footings, foundations, asphalt and concrete paving, and utilities associated with the demolished facilities and ancillary structures
- Site restoration services required for "green field" completion of the demolition process
- Movement and relocation of equipment deemed salvageable for re-use

# Corporate Qualifications Corporate Qualifications CIVIL CONSTRUCTION



**O**UR **HISTORY** 



In today's competitive markets, the reputation and track record of a contractor are critical. Pangea's business approach is based on a firm understanding of the client's needs and project scope. Clients have found that Pangea delivers quality projects at a competitive cost gaining numerous client recognitions for jobs well done in addition to repeat business.

Pangea's Civil Construction division project managers, superintendents and craftsmen average over 20 years experience in construction of infrastructure. Our skilled craftsmen include; Carpenters, Cement Masons, Operating Engineers, Laborers, and Teamsters.

Pangea has been involved in over 400 diverse construction projects, with a wide range in contract value and complexity. Pangea has performed work for clients such as Ameren, Prairie State Generating Company, Metropolitan Sewer District, Gateway Constructors, Washington University Lambert International Airport. Pangea also has significant experience working with complex projects involving direct customer involvement with such groups as the U.S. Army Corps of Engineers, the U.S. Department of Energy, the National Nuclear Security Administration and the U.S. Air Force.

"The Little Rock District Corps of Engineers (Small Business Office) submits a nomination for the Small Business Prime Contractor of the Year Award for 2009... The contractor is nominated based upon their excellent performance, exceptional technical achievements, and diligence to contractual detail."

~ Shirley Bruce U.S. Army Corps of Engineers, Little Rock District

Pangea owns a fleet of well maintained, low-hour equipment which includes excavators, loaders, and dozers. We can quickly mobilize resources and labor to the job site, saving our clients time and money.

### **CIVIL CONSTRUCTION**





**Project Details** Title: North Hill Parking Lot Contract No. 4000052526 Client: UT-Battelle/U.S. Department of Energy Location: Oak Ridge National Laboratory, Oak Ridge, TN Contract Amount: \$2,325,877 Contract Type: Start Date: 8/24/2006 End Date: 1/31/2007 Reference

Reference
Angela Shillings
UT Battelle
P.O. Box 2008, Bldg. 1060COM
Oak Ridge, TN 37831
865-576-1552

shillingsag@ornl.gov

Pangea was awarded the Oak Ridge National Laboratory (ORNL) North Hill Parking Lot Project subcontract by UT-Battelle. The contract award was considered to be a standard construction project. The primary scope of the project was the installation of a new parking lot and paved access road. The work was performed on the main campus of the ORNL in a lower security area of the site.





The major project activities and included:

- Clearing and Grubbing
- Transformer installation and Power Supply modifications
- Site Grading, hillside / site excavation (including boulder removal)
- Electrical Duct Bank and Power / Communication Cable installations
- Storm Water Drainage System
- Backfill and Grading
- Segmented Retaining Wall Installation
- Prep, grading and paving of access road
- Sidewalk installations
- Asphalt Paving
- Exterior Bollard and Pole Light installations

### **CIVIL CONSTRUCTION**





**Project Details** 

Title: Dead Creek, Segment B Liner System

Project

Contract No. **450922526** 

Client: Solutia, Inc.

Location: Sauget and Cahokia, Illinois

Contract Amount: \$1,936,114
Contract Type: Firm-Fixed
Start Date: September 2007
End Date: January 2009

Reference

Ray W. Scherrer, URS Corporation

1001 Highlands Plaza Drive West, Suite 300

St. Louis, MO 63110

Pangea, Inc. was contracted by Solutia, Inc. to perform work on the Dead Creek Segment B Liner Project. Segment B of the Dead Creek channel is located between Queeny Avenue and Judith Lane and spans between Sauget and Cahokia, Illinois. The project encompassed both the western and eastern sides and is approximately 2,400 feet

long, spanning the creek channel. The project included clearing and grubbing, removal of the previous creek bed liner, reshaping the channel contours, installing both a geotextile and geomembrane liner, and placement of riprap bedding, riprap, and an articulated concrete block revetment protection system.





The Scope of Work included the following:

- Clearing and grubbing of the creek channel area
- Erosion, sediment and storm water control
- Removal of the existing geotextile fabric
- Segregation and storage of the geotextile fabric for subsequent disposition by the owner
- Alteration of the existing sub-grade to match desire contours (cut and fill, backfill)
- Construction and verification of a sub-grade layer for liner and surface features
  - Construction of new liner system (geotextile and HDPE geomembrane)
  - Deployment of protective surface features (bedding stone, riprap)
  - Deployment of Articulated Concrete Block (ACB) revetment system

### **CIVIL CONSTRUCTION**

UTILITY, MUNICIPAL, INSTITUTION AND GOVERNMENT CIVIL CONSTRUCTION PROJECTS



Project Details

Title: Highway 64 Reconstruction Project

Contract No.

Client: Gateway Constructors/Metropolitan Sewer District
Location: Saint Louis, Missouri

Contract Amount: \$316,300
Contract Type:
Start Date:
End Date:
Reference

Pangea has been selected by Gateway Constructors in a joint venture of two Saint Louis firms: Milstone Bangert and Fred Weber, and the national firm of Granite Contractors to perform a sewer bypass at the Hanley Road over-pass as part of the Highway 64 reconstruction. Pangea is a qualified

deep sewer installar by MSD and the City and County of Saint Louis. As part of this project, Pangea will install approximately 528 lineal feet of 30" reinforced concrete sewer pipe, 180 lineal feet of 10" DIP for sanitary sewer, 58 lineal feet of 30" reinforced concrete sewer pipe, 180 lineal feet of 10" DIP for sanitary sewer, 58 lineal



feet of 24" SDR-35 and 7 manholes. Pangea will be working in close proximity to a fiber optic cable and will need to be very careful in our excavations. Additionally, we are crossing a live 8" gas main, ATT phone cables along with fiber optic. Pangea will be excavating from 10 feet in depth to over 20 feet in depth so in some areas we will be using a stacked trench box for safety. Pangea will be bypass pumping to tie the new configuration into the existing MSD facilities and a 10" diesel pump will be necessary to complete the tie-in.



# Corporate Qualifications Corporate Qualifications ENVIRONMENTAL



**OUR HISTORY** 



Founded in 1994, Pangea began working on radiological and environmental projects, starting with support for the site closure of the Department of Energy former Superfund Site in Weldon Spring, Missouri. Pangea has since leveraged those initial tasks into building a strong professional staff and securing a broad range of projects in both environmentally impacted and clean construction, environmental remediation, waste management and D&D services. Pangea has extensive experience in the identification, characterization, remediation and disposal of radiological wastes.

Environmental Remediation projects have included:

- Chemically and Radiologically Contaminated Soil Remediation
- Waste Treatment
- Contaminated Demolition
- Waste Categorization/ Segregation
- Underground Storage Tank Removal
- Waste Transportation & Disposal
- Explosive Ordnance Removal

Pangea possess an NRC License which is required to handle and dispose of nuclear contaminated materials. Pangea also holds a nationwide contract to perform a variety of waste management services involving nuclear materials for the U.S. Department of Energy.

Nationwide DOE IDIQ # DE-AM09-05SR22407

"Pangea's performance at the Crab Orchard, Site 36 WWTP Remediation project can best be summarized as that of an ideal contractor. Pangea's performance saved time and resulted in cost savings. The spirit of cooperation and positive attitude pervaded all aspects of the project."

~ Margaret Lake, Senior Chemist U.S. Department of the Interior, Bureau of Reclamation

Pangea has personnel with Security Clearance.

Under the General Service Administration (GSA) contract # GS-10F-0483M, Schedule of Item #899-8, Pangea is approved to provide Remediation Services that cover every step, from initial site characterization to post remedial site restoration and monitoring, for both government and private industry clients.