



ENGINEERING, INC.

Geotechnical, Environmental & Civil Engineering Consultants

OKM ENGINEERING, INC.

GEOTECHNICAL, ENVIRONMENTAL & CIVIL ENGINEERING CONSULTANTS

STATEMENT OF QUALIFICATIONS



Main Office: 112 S. Madison Avenue, Dallas, TX 75208 Phone 214-941-9412 Fax 214-941-9445
Branch Office: 810 E. Abram, Suite B., Arlington, TX 76010 Phone 817-657-7995 Fax 817-861-1740



OKM ENGINEERING, INC.

GEOTECHNICAL, ENVIRONMENTAL & CIVIL ENGINEERING CONSULTANTS

STATEMENT OF QUALIFICATIONS

TABLE OF CONTENTS

	<u>PAGE</u>
I INTRODUCTION	1
II OKM SERVICES	3
Geotechnical Services	3
Environmental Services	4
Construction Materials Testing	5
Civil Engineering Services	6
Water Resources Engineering	6
III QUALITY ASSURANCE & QUALITY CONTROL (QA/QC).....	7
OKM Consultants	7
IV HEALTH SAFETY	8
V ETHICS.....	8
VI INSURANCE.....	8
VII DISADVANTAGED BUSINESS ENTERPRISE	9
RESUME OF PRINCIPAL	
PROJECT EXPERIENCE	

I. INTRODUCTION

We approach each project in a manner that recognizes its uniqueness. Our dignity is derived from the quality of our products, and in satisfying our clients needs.

1.1 OKM Engineering, INC. (OKM) is a Texas licensed Professional Engineering Firm that was established in 2002. OKM is HUB/DBE certified.

OKM is a progressive and innovative engineering organization that offers engineering solutions for architects, developers, constructors, engineers, and

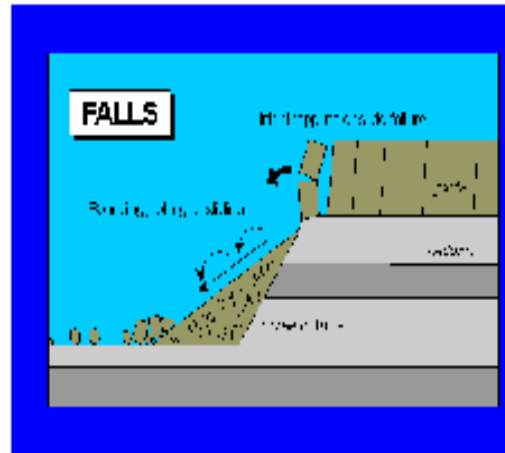
environmental consultants. OKM specializes in geotechnical, environmental, and civil engineering consulting services. The principal of the firm brings an extensive experience in design and on regulatory issues gained by working with different top consulting firms from different parts of United States, including the states of New Jersey, Delaware, Pennsylvania, New Mexico, and Texas. In addition to the general geotechnical, environmental and civil engineering consulting services, OKM performs specialized studies relating to claims resolution, technical investigation, litigation support, and construction phase consultation and monitoring.

Dr. Morohunfola is the principal of the firm, and has a wide range of experience spanning over twenty years in both academic research, and professional engineering practice. Prior to starting OKM Engineering, Dr. Morohunfola served with two consulting firms based in El Paso, Texas, and Las Cruces, New Mexico between March 2001 and April 2002. He served as the Geotech/Geoenvironmental Group leader for the El Paso based consulting firm, and as the project leader in the areas of hydraulics & hydrology, and transportation engineering for the New Mexico based engineering consulting firm. Before that, and for over six years, Dr. Morohunfola served as a project engineer on various engineering projects involving design, analysis, and report preparation for geotechnical systems including slope stability, piles, caissons, pressure grouted intrusion footings, rock anchors and tieback systems on several Pennsylvania Department of Transportation (PennDOT) projects. He has an extensive experience in the preparation of subsurface investigation programs, and improvement of subgrades including use of geosynthetics, dewatering systems, and dynamic compaction. His experience also includes the design



and analysis of slope stabilization system, flexible and grid retaining walls, sheet piling, bracing, and anchored systems.

Dr. Morohunfolo has performed scour analysis at bridges and developed recommendations for remediation. He has performed analytical and computerized modelling of reinforced/unreinforced slope stability problems, foundation design, hydrologic and hydraulic analysis using PCSTABL, COM624, DRIVEN, MODFLOW, MT3D, AQUTSOLV, HEC-RAS, HEC-HMS, MINITAB, and other applications. Dr. Morohunfolo's experience extends to civil, air quality modelling, water distribution system design, environmental site



assessment; drainage systems and grading plans; stormwater management plan; construction consultation and oversight; quantities and specifications.

For over three years in the 1980's, Dr Morohunfolo worked as a Project engineer for the Nigerian National Petroleum Corporation (NNPC). The NNPC is responsible for exploration, exploitation, and management of petroleum resources generating over ten billion dollars annually. In 1994, Dr. Morohunfolo served as the United Nations Development Program's consultant (UNDP) to the National Water Resources Institute in Nigeria. Dr. Morohunfolo has authored and co-authored a number of publications.

OKM stresses the importance of value engineering, and best management practice. OKM achieves these qualities by performing in-depth research on every project, consulting with other professionals recognized and respected by their peers for inputs, and reviewing of recommendations to ensure that our clients and the public are provided the highest quality of service. This approach includes the end user as part of the design process to achieve a team approach to successfully complete the project. **OKM can provide specialized consulting services to produce efficient solutions by utilizing our extensive experience over the years in different areas of engineering practice.**

OKM subcontracts its drilling, land surveying and part of testing services to our team members or local firms with appropriate certifications. OKM can team up with other firms to offer a more comprehensive.

II. OKM SERVICES

OKM was established in 2002, and the majority of the firm's project experience is derived from the experience of its principal. OKM has extensive experience in geotechnical, environmental, civil engineering consulting services. Specifically, OKM has been involved in several aspects of engineering projects including the construction phase consultation and monitoring services, geotechnical analysis and testing, slope stability assessment, deep foundations (piles), shallow foundations (spread and continuous type footings), various types of retaining walls designs, pavement and minor roadway design, hydraulics & hydrology, drainage and grading design, stormwater management plan, solid waste management, environmental site assessment and permit applications. A partial list of some of the project-experience of the firm is provided under the Appendix (Resume of Key Personnel and Project Experience).



Geotechnical Services

OKM is skilled in traditional investigation methods as well as specialized state-of-the-art computational modeling techniques. Subsurface conditions, soil stability, groundwater, earth pressures are issues of concern to designers and project owners. Designers are consistently required to extrapolate conclusions from analysis of a limited number of samples, and that creates risk. Added to this are the owner's concern of time constraints, changing regulations, new technologies and public responsibilities that are everyday parts of reality. The result makes risk management in engineering seem like a hazard in itself. That is where OKM comes in. By utilizing our superior expertise, and the wide range of experience of our team of



consulting engineers, we provide specialized consulting services to produce scientifically acceptable, legally defensible, and cost-effective solutions in the following area of geotechnical engineering practice:

- | | |
|-------------------------------|---------------------------------------|
| Highway/Building Structures | Subsurface soil/rock Exploration |
| Foundation Design | Slope Stability Analysis |
| Piles Foundations Design | Pavement Design |
| Ground Anchors, Tie backs | Shoring & Sheet Pile Design |
| MSE & CIP Retaining Walls | Bridge Scour Analysis |
| Reinforced Soil Slopes Design | Hydrogeological Studies |
| Grouting and Compaction | Seepage Analysis and Control |
| Distress Investigation | Monitoring Wells -Design/Installation |
| & Litigation Support | Geotechnical Testing |

Environmental Services

Environmental engineering is that branch of engineering that encompasses the design and construction of public and private works while considering the environmental impact to the surroundings. OKM’s key personnel have been involved in several environmental assessments (NEPA/ASTM) studies. Other areas of involvement in environmental engineering consulting services also include groundwater modeling to determine quantity of leachate generated at landfills using Waterballance and MODFLOW models. Analysis of pump and treat system and preparation of hydrogeological reports for petroleum contaminated sites. The principal of the firm is experienced in conducting aquifer/slug tests, soil gas surveys, piezometers, monitoring wells/gas wells installations for landfill to determine the hydraulic conductivity, and aquifer yield parameters required for hydrogeological modeling. He also has the experience on regulatory compliance for leaking underground storage tanks. Our environmental engineering related are services include:



- | | |
|---|--|
| Groundwater Resources Planning | Watershed Management |
| Landfills (siting studies/groundwater Contamination assessment) | Stormwater Management |
| Aquifer/Slug Tests | Environmental Assessment |
| Water supply/reservoir engineering | Environmental Impact Statement |
| Groundwater modeling | Leaking Underground Storage |
| Solid Waste Management | Air Dispersion Modeling |
| | Permit Application & Regulatory Compliance |

Construction Materials Testing Services

Projects owners including architects, developers, and contractors have always been concerned with the performance and quality of construction materials. Construction materials engineering services provided are for earthwork, asphalt, and concrete testing during construction. OKM established quality assurance/quality control procedures (QA/QC) for every aspect of our investigative process, including drilling and soil sampling. Having knowledge of how materials are used and expected to perform is the key to success of any project. Quality assurance and material testing provides guidance needed to establish an acceptable level of confidence that materials and techniques used are accomplished according to standards required by the design team. In general, however, the majority of construction materials testing and inspection projects involve some or all of the following:

Soils: Nuclear density, Sand cone density, Gradation, hydrometer analysis, Atterberg limits, Specific gravity, Soil stabilization design, Moisture-density relation, Unconfined strength, Permeability (falling head, and constant head), and California Bearing Ratio (CBR).

Concrete: Mix designs, Flatness/Levelness, Slump & Air Content, Unit weight/yield, Flexural strength, and Coring and testing cores.

Masonry: Comprehensive strength of masonry units, compressive strength of constructed prisms, Mortar mix design, Strength of mortar, Absorption, and Grout mix design.

Asphalt: Pavement section design, Bitumen extraction, Stability and flow, Mix designs, Aggregate gradation, Specific Gravity, Unit weight and Coring.

Aggregates: Moisture content, Gradation, Specific gravity, Soundness, Los Angeles abrasion, Absorption, Clay Lumps/Friable Particles, Flat/Elongated pieces and Fractured faces.



Civil Engineering Services

OKM offers a comprehensive range of services under general civil engineering consulting. OKM key personnel have been involved in various aspects of hydraulics and hydrologic (H&H) analysis on several projects, which is a key component in civil engineering design. OKM utilizes many computer models including HEC-HMS, HEC-1, TR-20, TR-55, SWIMM and **STORM** Hydrologic models, and HEC-2, HEC-RAS and HY-8 hydraulic models for performing H&H analysis. OKM has also developed several specialized programs in-house to aid in the H&H analysis, and statistical analysis to aid in computer model calibration. OKM personnel have been involved in the preparation of several pavement and minor roadway design, stormwater management plan, and drainage and grading design. Our basic general civil engineering consulting services at OKM include:



- . Slope Stabilization/Embankment Design/Analysis
- . Retention Pond Design
- . Hydraulics Structures Design
- . Stormwater Management
- . Water/Sewer Distribution System Design
- . Thrust Block Design for Pipelines
- . Drainage & Grading
- . Roadway/Pavement Design
- . Origin Destination Studies
- . Traffic Signal/Warrant Studies
- . Traffic Impact Analysis
- . Traffic Count/Delay Studies

Water Resources Engineering Services

Water resources engineering combines many aspects geology, hydrogeology, soil science and computer applications. Hydrogeology and hydrology play a key role in the planning, design, and implementation of many types of projects including groundwater resources conservation, development and evaluation for domestic and industrial usage. OKM applies state-of-the-art groundwater and surface water modeling software to achieve the clients' water resources engineering needs. Groundwater supply and quality is a worldwide concern. Assisting developers, municipalities, and water suppliers to maintain aquifer integrity is a major service provided by OKM. Water resources engineering services provided by OKM includes:



Groundwater & Surface water
Resources Evaluation & Planning
Groundwater Modeling
Surface water Modeling
Hydrologic & Hydraulics Study
Pump Tests/Aquifer Parameters Evaluation
Water Wells – Design/Installation

Watershed Management
Stormwater Management
Flood Hazard Assessment & Mitigation
Sedimentation & Scour Analysis
NPDES Permitting
Water Quality Evaluation & Treatment
Seepage Analysis and Control

III QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

Dr. Dov Lechinsky, Dr. Anthony Olorunisola, and Dr. Alex Cheng are three key members of our QA/QC team that are available for consultation. Each of these key members brings expertise in different areas of engineering applications. Dr. Lechinsky is a renowned expert in the field of geotechnical engineering, and has authored several publications. He is a recognized authority in slope stability analysis. He is a consultant on special settlement problems, and has been involved in several engineering designs. He is certified by the National Highway Foundation to teach Shallow Foundation designs and, for more than two decades, Dr. Lechinsky has been a member of faculty at the University of Delaware where he has been a Professor of Soil Mechanics.

Dr. Anthony Olorunisola, an expert in business and international communications, has reviewed several technical documents that include users' manuals for top consulting engineering firms with clients in the U.S., Canada, Mexico, the United Kingdom and France. Dr. Olorunisola is currently an Assoc. Prof.

Dr. Alexander H.-D. Cheng is a renowned expert in the area of Water Resources, and also serves as Professor and Chair of Department of Civil Engineering, University of Mississippi. Prior to joining Ole Miss, he taught at University of Delaware (1985-2001), Columbia University (1982-85), and Cornell University (1981-82). His research interests include water resources, boundary element methods, mechanics of porous materials, and ocean acoustics. He is currently an editor of the international journal *Engineering Analysis with Boundary Elements* (Elsevier), and the Editor-in-Chief of a book series *Progress in Water Resources* (WIT Press), and previously an Associate Editor of the *Journal of Engineering Mechanics*, ASCE (1998-2000). His honors and awards include the Walter L. Huber Civil Engineering Research Prize, ASCE (1994), Basic Research Award, U.S. National Committee for Rock Mechanics, National Research Council (1994 and 1999), and the Eminent Scientist Award, WIT (2001). He is the author of the book *Multilayered Aquifer Systems* (Dekker, 2000) and its application software, and co-editor of the books *Computational Stochastic Mechanics* (CMP/Elsevier 1993)

and *Saltwater Intrusion in Coastal Aquifers* (Kluwer 1999). He has organized and chaired a number of international conferences, including two that he co-founded: *the First International Conference on Saltwater Intrusion and Coastal Aquifers* (2001) and *the First Biot Conference on Poromechanics* (1998). He is also an Honorary Professor at the Department of Engineering at Kings College, University of Aberdeen, and a Fellow at the Wessex Institute of Technology, UK. He is cited in *Who's Who in the World*, *Who's Who in America*, *Who's Who in Science and Engineering*, and *American Man and Woman of Science*.

IV HEALTH & SAFETY

OKM provides a comprehensive Safety, Health and Environment (SHE) program for the protection of our employees and the public. The program includes mandatory monthly training seminars, providing required safety equipment, and documenting and addressing safety concerns.

V ETHICS

OKM practices engineering and associated technical services in accordance with the strictest ethical practices. Our staffs are routinely subjected to discussions concerning ethical and appropriate practices. In addition, we take all complaints very seriously, and if unethical behavior is confirmed in an employee, strong disciplinary action is typically taken. This strong stance allows us to maintain our reputation as a top quality firm.

VI INSURANCE

OKM’s Insurance coverage is as follows:

<u>TYPE OF COVERAGE</u>	<u>LIMITS OF LIABILITY</u>
Worker’s Compensation	Statutory Limits
General Liability: Comprehensive.	
Contractual, independent contractors,	
Personal injury	
General Aggregate	\$1,000,000
Bodily Injury	\$1,000,000 each person
Property Damage	\$1,000,000 each occurrence

Automobile Liability:

Comprehensive, owned, hired, non-owned \$1,000,000

Professional Liability:

Errors and Omissions \$1,000,000

DISADVANTAGED BUSINESS ENTERPRISE

The State of Texas, Texas Department of Transportation (TxDOT) certifies OKM as a Disadvantaged Business Enterprise (DBE), Small Disadvantaged Business (SDB), Minority/Women Business Enterprise (M/WBE) and Historical Underutilized Business (HUB). The North Central Texas Regional Certification Agency (NCTRCA) certifies OKM as a DBE.

WE ARE READY TO SERVE YOU FOR ALL THE RIGHT REASONS

OKM’s commitment, diverse experience, access to reputable professionals respected in consulting practice with diverse experiences for reliable and quality work will be a valuable asset to your project. OKM stresses the importance of value engineering, and the implementation of the best management practice. By utilizing our extensive experience over the years in different areas of engineering practice, OKM can provide specialized consulting services to produce efficient solutions. **We would like to work with you on your next, and on-going projects.** We welcome your inquiries and look forward to the opportunity to provide our services to you. For more information on services provided by OKM, please contact us through the information provided below.

CONTACT INFORMATION

Shola Morohunfola, Ph.D., P.E., P.H.-GW, President

Tel: 214-941-9412; Fax 214-941-9445

E-mail: sholaM@okm-engineering.com

Main Office: 112 S. Madison Avenue, Dallas, TX 75208 Phone 214-941-9412 Fax 214-941-9445
Branch Office: 810 E. Abram, Suite B., Arlington, TX 76010 Phone 817-657-7995 Fax 817-861-1740

RESUME OF PRINCIPAL

Olushola Morohunfola, Ph.D., P.E., P.H.-GW

President

Professional summary

Dr. Morohunfola started OKM Engineering, Inc. in the spring of 2002. Prior to starting OKM, he served with two consulting firms based in El Paso, Texas, and Las Cruces, New Mexico between March 2001 and April 2002. He served as the Geotech/Geoenvironmental Group leader for the El Paso based consulting firm, and as the project leader in the areas of hydraulics & hydrology, and transportation engineering for the New Mexico engineering consulting firm. Before that, and for over six years, Dr. Morohunfola served as a project engineer on various engineering projects involving design, analysis, and report preparation for geotechnical systems including slope stability, piles, caissons, pressure grouted intrusion footings, rock anchors and tieback systems on several Pennsylvania Department of Transportation (PennDOT) projects. He has experience in the preparation of subsurface investigation programs, and improvement of subgrades including use of geosynthetics, dewatering systems, and dynamic compaction. His experience also includes the design and analysis of slope stabilization system, flexible and grid retaining walls, sheet piling, bracing, and anchored systems. He has been involved in the design of over five hundred projects.

Dr. Morohunfola has performed scour analysis at bridges and developed recommendations for remediation. He has performed analytical and computerized modeling of reinforced/unreinforced slope stability problems, foundation design, hydrologic and hydraulic analysis on micro and mini frame computers using PCSTABL, COM624, DRIVEN, MODFLOW, MT3D, AQTUSOLV, HECRAS, HEC-HMS, MINITAB, and other applications. Dr. Morohunfola's experience extends to civil, air quality modeling, water distribution system design, environmental, site, and hydrology where he has evaluated erosion control measures using various federal, state and local regulations; drainage systems; construction consultation and oversight; final design plans, quantities and specifications.

Dr. Morohunfola has a lot of exposure to international projects having worked for over three years as a Project Engineer for the Nigerian National Corporation earlier in his carrier. The corporation is responsible for exploration, exploitation, and management of natural resources that generated over ten billion dollars annually for the country. Dr Morohunfola also served as the United Nations Development Program's consultant to the National Water resources Institute in the fall of 1994. Dr. Morohunfola has a vast research experience in the areas of surface water, and groundwater modeling, and has authored and co-authored a number of publications.

Professional Qualifications

Professional Engineer, PA, 1996 (Reg. No.: PE-050517-E)
Professional Engineer, NM, 2001 (Reg. No.: 15307)
Professional Engineer, TX, 2001 (Reg. No.: 88387)
Professional Hydrologist -Ground water, 1997 (AIH Certificate No. 1464)
Microsoft Certified Professional (M.C.P. No. 2080585)
OSHA 40-Hour Certified (1992)

Education

Ph.D. Civil Engineering, University of Delaware, 1992
M.Eng. Civil Engineering, University of Ilorin, 1986
B.S. Civil Engineering, University of Lagos, 1983

Texas Department of Transportation Certifications:

10.1.1: Hydrologic Studies
10.2.1: Basic Hydraulic Design

- 10.5.1: Bridge Scour Evaluations and Analysis
- 14.1.1: Soil Exploration
- 14.2.1: Geotechnical Testing
- 14.3.1: Transportation Foundation Studies
- 14.4.1: Building Foundation Studies

Employment history

- 05-2002 to present – OKM Engineering, Inc., El Paso/Dallas, TX
- 09-2001 to 04-2002 - AMEC Earth & Environmental, Inc., El Paso, TX
- 03-2001 to 08-2001 - The Land Group, Inc., Las Cruces, NM
- 1995 to 03/2001 - Geotechnical Engineer with Geo-Technical Services, Inc., Harrisburg, PA
- 1994 to 1995 - Project Manager with Morotech, Inc. Mullica Hill, NJ
- 1992 to 1994 - Project Engineer with Sadat Associates, Inc., Princeton, NJ
- 1986 to 1988 - Project Engineer with Nigerian National Petroleum Corp. (NNPC)
- 1983 to 1984 - Project Engineer with NNPC

Publications

- “Synthetic Streamflow Sequences for West African Rivers,” with E.S. Oyegoke, O.T. Talabi and L. Oyebande. Proceedings of Hamburg Symposium, August 1983. Iahs Pub. No. 140.
- “Application of Explicit Hydraulic Routing Technique for assessing River Ogunpa Channelization,” M. Eng. Thesis, 1986.
- “Boundary Element Formulation for Multi-Aquifer System,” with A. H-D. Cheng. Proceedings BETECH90 University of Delaware, Vol. 1, pp. 145-156, 1990.
- “Analytical and Numerical Solutions for Multiple Leaky Aquifer Systems,” Ph.D. dissertation, University of Delaware, February 1992.
- “Solutions of Multiple Leaky Aquifer Systems I: Pumping Well Problems,” with A. H-D. Cheng, Water Resources Research, 29, 2787-2800, 1993.
- “Solutions of Multiple Leaky Aquifer Systems II: Boundary Element Method,” with A. H-D. Cheng, Water Resources Research, 29, 2801-2811, 1993.

**SELECTED PROJECTS THE
PRINCIPAL HAS PERFORMED OR
PARTICIPATED IN THE DESIGN**

SELECTED LIST OF GEOTECHNICAL PROJECTS DESIGN EXPERIENCE (*HIGHWAY*)

No.	<u>Project Name And Location</u>	<u>Client</u>	<u>Summary of Services Provided</u>
1	State Road (S.R.) 0127 and S.R. 0062 Bridges, and Walls, Forest Co., PA Dist. 1.0	Pennsylvania Department of Transportation (PADOT) through Goodkind & O'Dea at GTS Technologies in Harrisburg, PA (GTS).	Developed boring exploration plan, performed geotechnical exploration, lab tests, slope stability analysis, scour analysis, lateral pile capacity analysis, and prepared structural foundation geotechnical report (SFGR).
2	S.R. 2049, Sec 047 Bridges, Walls and Roadway, Lycoming Mall Interchange Project	PADOT through Urban Engineers at GTS.	Developed boring exploration plan, performed geotechnical exploration, lab tests, slope stability analysis, scour analysis, lateral pile capacity analysis, roadway report, and SFGR.
3	S.R. 0001, Sec. MW1, Media Bypass Noise Barrier, Tinnicum Twp., Delaware Co., PA	PADOT through Armmann & Whitney at GTS	Developed boring exploration plan, performed geotechnical exploration, lab tests, slope stability analysis, scour analysis, lateral pile capacity analysis, and SFGR.
4	S. R. 0080-52D (6 Bridges), Walls and Roadway, Northumberland & Union Counties, PA	PADOT through Urban Engineers at GTS.	Developed boring exploration plan, performed geotechnical exploration, lab tests, slope stability analysis, lateral pile capacity analysis, and SFGR.
5	SEPTA Mainline Project, Philadelphia, between 20 th & Market to 23 rd & Market Streets, Philadelphia, PA	PADOT through SYSTRA Consulting Engineers at GTS.	Expansion/ Renovation of existing rail-line bridges between 20 th & Market to 23 rd & Market Streets.
6	SEPTA Bridge 5.03, Wayne Avenue, Montgomery Co., PA	PADOT through Klein & Hoffman, Inc. at GTS.	Reviewed lab tests, performed slope stability analysis, and prepared SFGR.
7	Pedestrian Bridges over Conrail, City of Altoona, Blair Co., PA	PADOT through Whitney, Bailey, Cox & Magnani at GTS.	Developed boring exploration plan, performed geotechnical exploration, lab tests, lateral pile capacity analysis, and SFGR.
8	S.R. 0022-022 & 013, Dauphin Speeceville Project (Bridges, Culverts, Retaining Walls and Roadway), Dauphin Co., PA	PADOT through Urban Engineers at GTS.	Performed geotechnical investigations, scour analysis, slope stability, design and prepared SFGR. Reviewed H&H and several Roadway Reports.
9	S.R. 2008, Sec. 01B Bridge and Walls, Carbon Co, PA	PADOT through Borton Lawson at GTS.	Developed boring exploration plan, performed geotechnical exploration, lab tests, slope stability analysis, scour analysis, lateral pile capacity analysis, and SFGR.
10	S.R. 4006, Sec. 76S Bridge and Walls, Philadelphia Co., PA	PADOT through Alfred Benesch at GTS.	Developed boring exploration plan, performed geotechnical exploration, lab tests, slope stability analysis, lateral pile capacity analysis, and SFGR.
11	S.R. 0081, Sec. SDC, Schuylkill Co., PA	PADOT through McTish, Kunkel & Assoc., Inc. at GTS.	Developed boring exploration plan, performed geotechnical exploration, lab tests, slope stability analysis, lateral pile capacity analysis, and SFGR.

SELECTED LIST OF GEOTECHNICAL PROJECTS DESIGN EXPERIENCE (*BUILDINGS*)

No.	Project Name & Location	Client	Summary of Services Provided
1	Lordsburg Elementary School, NM <i>Addition of new Buildings</i>	Lordsburg Municipal School District (LMSD) through ASA Architects at AMEC in El Paso, TX.	Performed geotechnical investigations and foundation design.
2	Lordsburg Middle School, NM <i>Distress evaluation</i>	LMSD through ASA Architects (ASA) at AMEC in El Paso, TX.	Performed geotechnical investigations access the course of foundation structures distress for the entire school.
3	Wrangler Facility, El Paso, TX	Through PSRBB at AMEC in El Paso, TX.	Geotechnical investigations & foundation design for construction of a 308,000 SF addition to the Wrangler.
4	Community Center Building, Chaparral, NM	ASA Architects (ASA) at AMEC in El Paso, TX	Performed geotechnical investigations and foundation design.
5	New Fire/Police Substation, City of Sunland Park, NM	ASA at AMEC in El Paso, TX	Performed geotechnical investigations and foundation design
6	New Clint Fire/Police Substation, Clint, NM	ASA at ENCON International, Inc. (ENCON) in El Paso, TX	Performed geotechnical investigations and foundation design.
7	Pre-K to 8 th Grade School, El Paso, TX	Socorro Independent School District (SISD) at AMEC in El Paso, TX.	Performed geotechnical investigations and foundation design for a new school.
8	Eastwood High School, 2430 McRae Blvd., El Paso, TX	Ysleta Independent School District (YISD) at AMEC in El Paso, TX.	Performed geotechnical investigations and foundation design for a new library.
10	1000 George Dieter & Esther Lama Car Dealership, El Paso, TX	PADOT through Alfred Benesch at GTS.	Performed geotechnical investigations and foundation design for site of new car dealership.
11	Retail Center, El Paso, TX	PSRBB at AMEC in El Paso, TX.	Performed geotechnical investigations and foundation design for a new shopping complex.
12	Apartment Complex Buildings, Montana Senior Village, Las Cruces, NM	ASA at AMEC in El Paso, TX	Performed geotechnical investigations and foundation design for new apartment complex buildings.
13	New Office/Manufacturing Facility, Socorro, TX.	5 Star Developers at AMEC in El Paso, TX.	Performed geotechnical investigations and foundation design for a new industrial building.
14	Echostar Expansion, El Paso, TX	PSRBB at AMEC in El Paso, TX.	Geotechnical investigations & foundation design for a new industrial building.
15	Del Sol Medical Center Expansion, El Paso, TX	PSRBB at AMEC in El Paso, TX.	Geotechnical investigations & foundation design for a new medical building.
16	New Federal Court House, Las Cruces, NM	GSA through BPLW at ENCON in El Paso, TX.	Geotechnical investigations & foundation design for a 6-story Federal building.
17	MFSE Building, 69th St Shops/Yards, District 6-0, PA	PADOT through Klein & Hoffman, Inc. at GTS.	Geotechnical investigations, foundations design for buildings & miscellaneous structures rehabilitation.
18	Dexter H.S. Buildings Additions, Dexter, NM.	Dexter Consolidated School District at ENCON.	Geotechnical investigations and foundation design for buildings additions.

SELECTED LIST OF GEOTECHNICAL PROJECTS DESIGN EXPERIENCE (*UTILITIES*)

No.	Project Name & Location	Client	Summary of Services Provided
1	Elevated Water Storage Tank, Fort Bliss, Texas	Ft. Bliss Dept. of Army at AMEC in El Paso, TX).	Geotechnical investigation and Foundation design for water storage tank.
2	Fiesta Water Storage Reservoir, El Paso, TX	El Paso Water Utilities (EPWU) through Parkhill Smith & Cooper (PSC) at AMEC in El Paso, TX.	Geotechnical investigation and Foundation design for water storage tank.
3	Montwood Lift Station and Forcemain, El Paso, TX	EPWU through Brown & Caldwell (B&C) at AMEC in El Paso, TX	Geotechnical investigation and Foundation design for pipeline & lift station construction.
4	Montwood Lift Station Pipelines, El Paso, TX	EPWU through B&C at AMEC in El Paso, TX.	Geotechnical investigation & Foundation design for pipeline construction.
5	Mesa Valley Drain Interceptors, Phase 1B, El Paso, TX	EPWU through B&C at AMEC in El Paso, TX.	Geotechnical investigation & Foundation design for pipeline construction.
6	Chamberino Wastewater Improvements, Chamberino, NM	City of Chamberino through ASCG at AMEC in El Paso.	Geotechnical investigation & Foundation design for pipeline construction.
7	Communication Monopole, Carolina Road, El Paso, Texas	Paso Del Norte Surveying at AMEC in El Paso, TX.	Geotechnical investigation & Foundation design for Communication tower.
8	Communication Monopole, Resler Road, El Paso, Texas	Paso Del Norte Surveying at AMEC in El Paso, TX.	Geotechnical investigation & Foundation design for Communication tower.
9	Communication Tower, Kenworthy & Salem Drive, El Paso, TX	Verizon Wireless through Paso Del Norte Surveying (PDN) in El Paso, TX.	Geotechnical investigation & Foundation design for Communication tower.
10	Communication Tower, Union Ave., Las Cruces, NM	ALLTEL through PDN in El Paso, TX.	Geotechnical investigation & Foundation design for Communication tower.
11	ALLTEL Communication Tower, Doniphan, El Paso, TX	ALLTEL through PDN in El Paso, TX.	Geotechnical investigation & Foundation design for Communication tower.
12	Doniphan & Frontera, and Doniphan E Mesa, El Paso, TX.	EPWU through B&C at ENCON in El Paso, TX.	Geotechnical investigations and prepared geotechnical report for the construction of pipelines & diversion structure.
13	Waynesburg Correctional Institute, PA	PADOT through GSA at GTS.	Geotechnical investigation and Foundation design for wastewater treatment facility.
14	EPWU Pipeline Replacement at Hawskins, El Paso, TX.	EPWU through Dan Williams at ENCON.	Trench Safety Design report.
15	Collingsworth Pipeline Rehabilitation Project El Paso, TX	EPWU through Dan Williams at ENCON.	Trench Safety design report.
16	Fred Harvey Plant, El Paso, TX.	EPWU through B&C at ENCON in El Paso, TX.	Geotechnical investigations and prepared geotechnical report for the construction of Carbon Regeneration Building/Tank.

SELECTED LIST OF *CONSTRUCTION MATERIALS TESTING & INVESTIGATION FOR DISTRESS EVALUATION* PROJECT EXPERIENCE

No.	Project Name And Location	Client	Summary of Services Provided
1	City Wide Minor Drainage III, El Paso, Texas	City of El Paso at ENCON in El Paso, TX).	Quality assurance and construction materials testing.
2	McGregor Range/Ft. Bliss, El Paso, TX	J&J /HJ Joint Ventures at ENCON in El Paso, TX.	Quality assurance and construction materials testing.
3	Lower Valley Park Improvement, Lomaland, El Paso, TX	City of El Paso at ENCON in El Paso, TX	Quality assurance and construction materials testing.
4	Boderland Area Street & Drainage Improvement Phase I, El Paso, TX	City of El Paso at ENCON in El Paso, TX.	Quality assurance and construction materials testing.
5	LC 38, QA Building, White Sands Missile Range, NM	Corps of Engineer at ENCON in El Paso, TX.	Quality assurance and construction materials testing.
6	Ramona Elementary School Playground, El Paso, Texas	Ysleta Independent School Dist. at ENCON in El Paso.	Quality assurance and construction materials testing.
7	View Point Lift Station and Force Main Project, NM	Albuquerque Underground, Inc. at ENCON in El Paso.	Quality assurance and construction materials testing.
8	Professional Devt. Ctr., El Paso, TX	Urban Associates, Inc. at El Paso, TX.	Quality assurance and construction materials testing.
9	Communication Tower, Union Ave., Las Cruces, NM	ALLTEL through PDN.	Quality assurance and construction materials testing.
10	ALLTEL Communication Tower site, Cedar Oak Dr, El Paso, TX	Charles Taylor Communications, Albuquerque at ENCON.	Quality assurance and construction materials testing.
11	EPISD HVAC Renovations Phase I., El Paso, TX	El Paso Ind. Schl. Dist. at ENCON, TX.	Quality assurance and construction materials testing.
12	Remcon Office Building, El Paso, TX	Dantex Construction at EBCON, El Paso, TX.	Quality assurance and construction materials testing.
13	New Clint Fire station, Clint, TX.	Jan-Car Inc., 14201 North Loop, Clint, TX.	Quality assurance and construction materials testing.
14	WSMR School Renovation and Addition, NM.	Urban Associates, Inc. at El Paso, TX	Quality assurance and construction materials testing.
15	ASMP Mock-up Renovation, NM.	U.S. Army Corps of Engineer at ENCON in El Paso, TX.	Quality assurance and construction materials testing.
16	Lordsburg Middle School, NM <i>Distress evaluation</i>	LMSD through ASA Architects (ASA) at AMEC in El Paso, TX.	Failure investigations to access the cause of foundation structures distress for the entire school
17	1043 Broadmoor, El Paso, TX.	Engineering & Fire Investigation (EFI) at ENCON, TX.	Failure/distress investigation study on a property valued at over \$600,000.
18	Cielo Dorado, New Mexico	EFI at ENCON, TX.	Failure/distress investigation study on a property valued at over \$500,000.
19	City of El Paso Airport Water Reservoir, El Paso, NM	Robert Navarro, Inc. at AMEC, TX.	Failure/distress investigation study for water reservoir and slope stability analysis.
20	Erosion Studies, Corner of Lohman Avenue & Foothills Dr., Las Cruces, NM	Ft. Bliss Federal Credit Union at AMEC in El Paso, TX.	Evaluated the causes of erosion at newly acquired parcel of land, and to determine the responsible parties.

SELECTED LIST OF *CIVIL DESIGN* PROJECTS (HYDRAULICS & HYDROLOGY, DRAINAGE & GRADING, ROADWAY DESIGN) EXPERIENCE

No.	Project Name And Location	Client	Summary of Services Provided
1	Bridge #1648 Replacement at MP 36.22, outside Elephant Butte, Socorro County, NM	NM State Highway Dept, of Transportation (NMSHDT) through at The Land Group in Las Cruces, NM.	Drainage & Grading and roadway design associated with the replacement of existing New Mexico Bridge #1648 on State Rd 1 with a Box Culvert.
2	Bridge #1649 Replacement at MP 34.98, outside Elephant Butte, Socorro County, NM	NM State Highway Dept, of Transportation (NMSHDT) through at The Land Group in Las Cruces, NM.	Drainage & Grading and roadway design associated with the replacement of existing New Mexico Bridge #1649 on State Road 1 with a Box Culvert.
3	Bridge #1652 Replacement at MP 32.75, Socorro County, NM	NM State Highway Dept, of Transportation (NMSHDT) through at The Land Group in Las Cruces, NM.	Drainage & Grading and roadway design associated with the replacement of existing New Mexico Bridge #1652 on State Road 1 with a Box Culvert.
5	Lower Poverty Creek & Upper Poverty Creek at Winston, Sierra County, NM	NM State Highway Dept, of Transportation (NMSHDT) through at The Land Group in Las Cruces, NM.	Drainage & Grading and roadway design associated with the various crossing alternatives for NM HWY 52 to mitigate against the flooding of the crossing.
6	Finima Relocation Project, Nigeria	Nigerian National Petroleum Corporation (NNPC)	As a Project Engineer with the NNPC, reviewed Water/Sewer Distribution system designed by consultants.
7	New NNPC Headquarters in Abuja, Federal Capital, Nigeria	Nigerian National Petroleum Corporation (NNPC)	As a Project Engineer with the NNPC, was involved in preliminary design for drainage & grading, and water/sewer distribution system.
8	Communication Tower, Kenworthy & Salem Drive, El Paso, TX	ALLTEL through Paso Del Norte Surveying, Inc. (PDN).	Drainage & Grading and roadway design associated with the construction of a communication tower site.
9	Communication Tower, Union Ave., Las Cruces, NM	ALLTEL through PDN.	Drainage & Grading and roadway design for a communication tower site.
10	ALLTEL Communication Tower, Doniphan, El Paso, TX	ALLTEL through PDN.	Drainage & Grading and roadway design for a communication tower site.
11	ALLTEL Communication Tower site, Cedar Oak Dr, El Paso, TX	ALLTEL through PDN.	Drainage & Grading and roadway design for a communication tower site.
12	Verizon Communication Tower site, Ruidoso, NM	ALLTEL through PDN.	Drainage & Grading and roadway design for a communication tower site.
13	S.R. 0081 Sec. 393 (Lycoming Mall Interchange), Highland Park, Luzerne Co., PA	PADOT through Ammann & Whitney at GTS.	Performed roadway design for a major highway interchange.
14	Feasibility Study for Artificial Recharge Project, El Paso Water Utilities, El Paso, TX	El Paso Water Utilities at ENCON in El Paso, TX.	Performed hydrogeological investigation to determine the possibility of using artificial recharge methods to store un-tapped allocated water.

SELECTED LIST OF ENVIRONMENTAL PROJECT EXPERIENCE

No.	Project Name And Location	Client	Summary of Services Provided
1	Brownfield at 210 Noble Street, El Paso, TX	City of El Paso at ENCON in El Paso, TX.	Brownfield site environmental investigation and report.
2	Ft. Bliss BioCell Project, Ft. Bliss, TX	Ft. Bliss, Dept. of Army, Ft. Bliss, Texas at ENCON.	BioCell Design for remediation of petroleum contaminated soil and the permit application.
3	Allied Paving Leaking Petroleum Storage Tank at 5165 Hercules St., El Paso, TX.	Bert Bossbery/TNRCC at ENCON in El Paso, TX.	Remediation and Corrective action plan for a leaking Underground Petroleum Storage Tank site.
4	Annual Emissions Inventory Report for Clint & McCombs Solid Waste Landfills in El Paso, TX.	City of El Paso at ENCON in El Paso, TX.	Preparation of the Annual Emissions Inventory report for the two landfills in El Paso.
5	Permit Application for Installation of Passive Gas Venting Wells for Clint & McCombs SWLF in El Paso.	City of El Paso at ENCON in El Paso, TX.	Permit application for the installation of Passive Gas Venting wells, and the decommissioning of GMW wells.
6	Jenny Oil Corporation, Mahway, NJ.	Jenny Oil Corporation, Mahway, NJ at Sadat Associates, Inc. (SAI).	Analyzed pump-and-treat system, prepared geologic report, and prepared quarterly groundwater monitoring reports.
7	Dupont Eagle Run Site, Route I-95 between Newark & Wilmington, DE.	Wal-mart Stores at SAI in NJ.	Assisted in the delisting of the site's Water Resources Protection area designation and conducted ESA.
8	Elizabeth Landfill, Kapkowski Rd., Elizabeth, NJ.	Elizabeth Landfill, Kapkowski Rd., Elizabeth, NJ at SAI in NJ.	Performed GW and contaminant transport modeling; evaluated the extent of leachate generation in a non-sanitary landfill.
9	Plas-ti-con Corporation, Mt. Holy, Burlington County, NJ.	Plas-ti-con Corporation at SAI in NJ.	Performed contaminant transport modeling and also for Greater NY Box & Certified Metals in Clifton, NJ.
10	Remediation of a Petroleum contaminated site, Montville, NJ.	Furon Corporation, Montville, NJ at SAI in NJ.	Assisted in preparing construction drawings and specifications for air stripper treatment system.
11	Storm water Contaminant Studies in NJ.	Merck & Co. Inc., NJ. at SAI in NJ.	Performed storm water contaminant studies as part of requirements for NJPDES permit application.
12	Contaminant Loading at Edgeboro Landfill, NJ.	Middlesex County Utilities Authority and Edgeboro Disposal, Inc (EDI) at SAI in NJ.	Evaluated the potential for contaminant loading from GW to the Raritan/South Rivers as part of the requirement for NJPDES permits application.
13	Leachate Collection System, Edgeboro Landfill, NJ.	Edgeboro Disposal, Inc, NJ at SAI.	Assisted in the design of landfill leachate collection system and closure design.
14	Aquifer Testing at Linden Landfill in NJ.	Linden Landfill, NJ at SAI.	Piezometers installation; conducted aquifer/slug tests and tidal studies.
15	Phase I Environmental Site Assessment in NJ, MA, CT, PA, NC	Resolution Trust Corporation in Atlanta.	Performed environmental Site assessment for several sites.