

SECTION C: RESUMES-MEADE

Graycor Proposal Number: 1091467 June 13, 2014



Vice President, Engineering

Areas of Expertise

Business Operations Management
Electrical Power Distribution System Design
Electrical Power Generation
Supervisory Control and Data Acquisition System Design
Landfill Gas Collection System and Energy Recovery Plant Design
Cogeneration Plant Economic Analysis and Project Development
Plant Start-Up and Performance Testing
Process Control System Design
Process Control System Design

Project Experience

Business Operations Management

- Meade Electric Company Meade Electric Company McCook, IL
 Serves as Vice President of Engineering and Supervising Electrician for Meade
 Electric, an electrical design and construction firm with annual revenues of
 approximately \$400 million, which serves the greater Chicago, IL, Milwaukee, WI,
 and Gary, IN metropolitan areas. Responsible for licensing, permitting and
 engineering design functions.
- Midwest Traffic Products Romeoville, IL
 Served as Vice President of operations for a small business engaged in the production
 and marketing of a traffic signal preemption system based upon global positioning
 system navigation and two way radio communication. The business also marketed
 Supervisory Control and Data Acquisition Systems (SCADA) and traffic control
 products as manufacturer's representatives. Responsibilities included the oversight of
 accounting, parts procurement, production and system installation functions within
 the company.
- Bio-Energy Partners Oak Brook, IL
 As an employee of Waste Management of North America, he was responsible for providing financial and technical oversight for a partnership owning 28 small power production "qualifying facilities" with over 150 MW of gross electrical generation capacity in 16 states across the United States. The partnership's annual revenues were approximately \$25 million. Responsible for overseeing the development of project economic analysis, technical feasibility studies and annual operations and maintenance budgets.



Vice President, Engineering

Engineering Manager

• Rust Environment & Infrastructure – Oak Brook, IL

Managed a staff of 12 engineers and technicians providing consulting engineering
services for the design and permitting of landfill gas control systems and energy
recovery facilities. Primary responsibilities include determining staffing levels,
maintaining project backlog, and managing group financial performance.

Electrical Power System Design

- Commonwealth Edison Chicago, IL Managed and provided technical oversight of a team responsible for designing, permitting, installing and commissioning over 1400 "Smart Grid" devices, including reclosers, sectionalizers, capacitor banks and line regulators installed on 12.47kV utility power distribution feeders across northern Illinois. The project has spanned 5 years in duration to date with approximately \$14 million in cost.
- North Pier Terminal Chicago, IL
 Designed the high voltage and 480 V power distribution system as well as base building lighting and fire detection systems for 500,000 square foot office building renovation project. Worked with the electric utility company, City Building Inspection Department and Bureau of Fire Prevention in developing system designs, and provided construction oversight inspections.
- Computer Room Uninterruptible Power Supply, University of Chicago Chicago, IL Specified and designed installation of 500 KW, 480 V, 4 hour rated uninterruptible power system for payroll computer system. Provided construction oversight inspections and system start-up assistance.

Electrical Power Generation

- Landfill Gas-to-Electrical Generation Plant Standard Designs, Waste Management of North America – Oak Brook, IL
 - Provided technical direction for developing designs for the small power production facilities utilizing both internal combustion reciprocating engines and combustion gas turbines. Duties included the selection of electrical generating equipment and development of protective relay schemes.



Vice President, Engineering

Supervisory Control and Data Acquisition System (SCADA) Design

- Commonwealth Edison Chicago, IL
 Managed multi-firm design/build team responsible for designing, permitting,
 installing and commissioning SCADA remote terminal units (RTUs) at 407 utility
 power distribution substations across northern Illinois. The project spanned 5 years
 in duration and exceeded \$40 million in cost.
- Northside Generating Station Jacksonville, FL
 Responsible for designing and managing the start-up of a SCADA system interfacing
 a landfill methane gas compression station with a natural gas fueled steam turbine
 electrical generation plant owned by Jacksonville Electric Authority. The SCADA
 system interconnected process equipment at the compression station and condensate
 knockout vessels along a 2 mile medium pressure pipeline with the generation plant
 control room, to provide control, alarm and safety shutdown functions.
- Keystone Recovery Plant Throop, PA Responsible for designing, procuring, and managing the installation and start-up of a SCADA system interfacing two vacuum compressor skids, three booster compressor skids, an off-gas flare, a 5.6 MW internal combustion reciprocating engine electrical generation plant, and a 25 MW steam turbine electrical generation plant. The SCADA system interconnected motor control centers, local skid control panels, and distributed programmable logic controllers to a personal computer providing a manmachine interface which allowed remote monitoring, control and data logging functions for the various pieces of process equipment.
- Illinois Department of Transportation Schaumburg, IL Responsible for directing warranty repair, troubleshooting and start-up for the IDOT District 1 Roadway Pumping Station SCADA system, which consisted of Master and Slave Computer stations and 50 RTU's communicating via radio and telephone line.

Landfill Gas Collection System and Energy Recovery Plant Design

Greene Valley Landfill Gas Collection System – DuPage County, IL
 Provided technical oversight for the design and construction quality assurance of a
 landfill gas collection system for the capture and disposal of up to 12
 million cubic feet of landfill gas per day. The system consists of vertical extraction
 wells, buried conveyance piping, gas condensate knock-outs and storage tanks,
 pressure blowers, and enclosed flare units.



Vice President, Engineering

Metro Methane Recovery Facility – Des Moines, IA
 Provided technical oversight for the equipment selection and design of a 4.8 MW landfill gas-to-electric generation facility. The plant utilized six internal combustion reciprocating engines, two fuel gas compression skids, 4,160 V switchgear and 13.2 kV electrical interconnection to produce and deliver electrical power into the utility distribution system.

Cogeneration Plant Economic Analysis and Project Development

• Sauk Valley Community College Cogeneration Plant – Dixon, IL Conducted project technical feasibility study and economic analysis recommending the installation of a natural gas driven internal combustion reciprocating engine for electrical peak shaving, with provisions for future heat recovery. Conducted negotiations with the electric utility company. Designed electrical systems, provided construction oversight, and start-up services for the facility.

Plant Start-Up and Performance Testing

- Central Sanitary Landfill Gas-to-Electric Plant Pompano Beach, FL Responsible for directing equipment vendor representatives and installation contractor personnel in the start-up, commissioning, and performance testing of a 16.5 MW generating facility containing five combustion gas turbines, five fuel gas compression skids, two 480 V motor control centers, two 4,160 V switchgear and a 138 kV electrical interconnection to the electric utility transmission system.
- Keystone Power Production Plant Throop, PA
 Responsible for managing equipment vendor representatives, installation contractor,
 and site personnel for the start-up, commissioning, and performance testing of a 3.2
 MW generating facility containing four internal combustion reciprocating engines,
 one fuel gas compression skid, a 480 V motor control center, a 4,160 V switchgear,
 and a 12.5 kV electrical interconnection to the electric utility company power
 distribution system.

Process Control System Design

- Boiler No. 4 Controls Modification and Boiler House Network Enhancement, Great Lakes Naval Training Center – Great Lakes, IL
 Designed, and supervised the installation, start-up, commissioning, and performance testing of a replacement control system for a 100,000 lb/hr gas and oil fires steam boiler, and a Boiler House Ethernet control network utilizing 3 servers and 13 work stations.
- Automated Truck Loading Rack, Seneca Petroleum Lemont, IL
 Designed, and supervised the installation, start-up, commissioning, and performance testing of an automated truck loading system utilizing PLC, touch screens, electronic



Vice President, Engineering

truck scales, work station and printers connected via Ethernet control network. System provides customer, order and product validation prior to fill, automatic truck filling, recording of sales transaction, and printing of Bill of Ladings.

Litigation Support

• Graham & Dunn, PC – Seattle, WA

Conducted an engineering study, developed an assessment report, and provided expert witness testimony on landfill gas collection and its utilization in internal combustion reciprocating engines for electrical power generation. The work was for a civil lawsuit prosecution relating to performance problems at a landfill gas-to-electrical generation facility.

- American Arbitration Association Dallas, TX
 Served as chief arbitrator in a case relating to the design, fabrication, installation and performance of electrical generation equipment at multiple landfill gas-to-energy projects within the United States.
- Morrison & Foerster Los Angeles, CA
 Conducted an engineering study, developed an assessment report, and provided
 expert witness testimony on landfill gas collection and its utilization in combustion
 gas turbines for electrical power generation. The work was for a civil lawsuit defense
 relating to performance problems at a landfill gas-to-electrical generation facility.

Palmetto Landfill - Wellford, SC

Provided expert witness testimony on landfill gas composition, its generation within refuse, and gas extraction system design during an administrative hearing relating to a landfill permit modification.

• New Milford Landfill – New Milford, CT

Provided expert witness testimony on landfill gas composition, gas generation within refuse, and gas collection system design and operations during a court hearing relating to a landfill disruption.

Education

B.S., 1980, Electrical Engineering, University of Notre Dame, Notre Dame, Indiana (graduated Magna Cum Laude)

M.B.A., 1992, Operations Management, Illinois Institute of Technology, Chicago, Illinois



Vice President, Engineering

Professional Registration

Institute of Electrical and Electronic Engineers
National Fire Protection Association
Registered Professional Engineer
Supervising Electrician
Master Electrician – States of Indiana, Iowa, Ohio, Oklahoma and Wisconsin

Presentations, Publications, Awards

SCADA System Security from a Field Perspective. Presentation made at Cyber Security for Utilities Conference, hosted by Platts, Chicago, Illinois on May 17, 2004

Landfill Gas System Operations and Maintenance: High Tech Delivery of Landfill Gas to Multiple Sites. Paper co-authored with B.W. Rogers, P. Custer, and T.J. Kukowsky and presented at the Solid Waste Association of North America 22nd Annual Landfill Gas Symposium, on March 22-25, 1999

Waste Disposal Activities and Energy Production from Municipal Waste Landfills: A State-of-the Art Review of Science and Technology. Paper co-authored with and presented by Vedat Batu at the Symposium on Energy Production, Consumption, and Environmental Effects - HABITAT 11, June 1996

The Economics of Landfill Gas to Energy, Presentation made as part of the U.S. EPA Landfill Methane Outreach Program at Waste Tech >95 Conference, January, 1995 and the Solid Waste Association of North America 18th Annual Landfill Gas Symposium, March 1995.

The Omega Hills Landfill Gas-to-Electrical Generation Project - 10 Years Later, presentation made at the Wisconsin Counties Solid Waste Management Association and Solid Waste Management Association of North America Winter Conference, January 1995.

Selection of a Prime Mover: Engines and Turbines, presentation made at Midwest Cogeneration Association=s 6th Annual Non-Utility Power Conference, July 1992.

Landfill Gas Environmental Regulations, and Landfill Gas Recovery Facilities, presentations made at Waste Management=s Landfill Gas Training Course, July 1992.



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Waste Management Gas Recovery Program, paper and presentation made at Waste Managements Landfill University, February 1991.

Waste to Energy, presentation made at Midwest Cogeneration Association=s 4th Annual Non-Utility Power Conference, June 1990.

Landfill Gas Recovery Plants, paper and presentation made a Waste Management=s Landfill University, January 1990.

Publications

The Impact of New Source Performance Standards Upon the Development of Landfill Gas-to-Energy Projects, paper published by the American Society of Mechanical Engineers and presented at the ASME/IEEE 1993 International Joint Power Generation Conference, October 1993.

The Selection of Electrical Generation Equipment for Use with Landfill Gas, paper published and presented at the Solid Waste Association of North America 16th Annual Landfill Gas Symposium, March 1993.

Developing Electric Utility Contracts and Interconnects for Small Power Production Facilities, article published in *Solid Waste & Power* magazine, December 1991.

Owner/Operator Experiences in Developing Electric Utility contracts and Interconnects, paper published and presentation made at the GRCDA 13th Annual International Landfill Gas Symposium, March 1990

Awards

Solid Waste Association of North America, Landfill Gas "Hall of Fame".

WMX Technologies, Inc., President=s Technical Excellence Award, 2nd Place, 1994. Adaptation of Caterpillar #3606 engine generator set for operation on landfill gas fuel.



Kirk Decker

General Foreman

Experience

Enbridge Hartsdale Terminal

• General Foreman.

Coordinate all manpower to work within the project schedule. Attend daily site meetings to address all craft interaction. Red-line drawings to track all job progress changes.

BP Refinery Kinder Morgan Coke Building – Whiting, IN

• Field Engineer.

Analyzed drawing data needed for construction site planning. Created and maintained Conduit/Cable Database to track job progress. Designed cable pull sheets, cable markers, and conduit tags.

US Steel Carbonyx - Gary, IN

General Foreman.

Oversaw job details and layout as job progresses. Requisitioned all material and interact with vendors for all orders. Handled all time keeping and billing as necessary to meet job costs. Directed any increase and decreases in manpower as needed so jobs will complete on time.

BP Whiting Refinery - Whiting, IN

• Electrical Project Planner.

Planned and assemble work packages for field-installed equipment. Coordinate with field supervision to balance work. Handled Requests for Information and Constructability issues with engineers to maintain the quality of work. Submitted material requests and schedule delivery times with material handling personal.

Praxair

• Quality Assurance/Quality Control Inspector.

Inspected full electrical systems from Substations to Telecommunication systems. Enforcing the National Electrical Code, along with job specifications. Applied National Electrical Code requirements for proper conduit/cable tray fill, along with proper cable sizing. Specialize in proper classification area requirements. Properly document day-by-day operations. Stop installation of unsatisfactory work, and provide solutions for a proper installation method.



Kirk Decker

General Foreman

Praxair Office Building

• Project Manager.

Coordinated job details between all crafts. Sent out all submittals, and interacted with vendors for all material orders. Handled all Requests for Information and Constructability issue.

Education

Ivy Tech State College – Gary, IN, Associates Degree of Applied Science in Apprentice Technology

IBEW LOCAL 697 Electrical Apprenticeship Program

Fluor Workface Planning Training

Fluor Field Supervision and Leadership Training

Continuing Education

NECA-IBEW Journeyman Inside Wireman

EPRI Instrumentation and Controls Certified

Electrical Project Supervision Certified

FOA Fiber Optics Association Certified

CAT 5e and CAT 6 Fiber Optics Association Certified

Level II Residential/Commercial HVAC Certified

Honeywell Fire Systems Certified

HILTI Firestop Systems Certified

HILTI Powder Actuated Tools Certified

NFPA 70E Certified

Occupational Safety and Health Administration 30-Hour Certified

CPR and First Aide Certified

Rigging Hazard Awareness Certified

Crane Signaling Certified

Confined Space Entry Certified

Work Zone Hazards Certified



Denis Hernandez

Manager

Project Experience

 West Kendall Baptist Hospital, Joe DiMaggio Children's Hospital, South Miami Hospital, Miami Arts Museum
 MEP BIM Coordinator-Senior CAD Manager. Electrical layouts coordination designing conduit routes throughout space provided. Utilized 3D MEP with Navisworks / CAD Elect and Revit MEP for most accurate coordination
 Attended coordination meetings ensuring all trades were coordinated and accounted, including discussion regarding possible alternate routes eliminating interference with other trades.

• BIM Design Manager

Bid jobs for Fire Alarm and Security in accordance with client's budget. Designed complete fire alarm layout, devices, wiring, and battery calculations. Devices include speaker strobe, smoke detectors, modules, the fire alarm panel, smoke detector, and many more. Utilized AutoCAD and excel, and prepared the drawings. Coordinated documentation and obtained permits. Provided immediate response to any issues raised by Electrical or Fire Marshall.

• Sr. Drafter/AutoCAD BIM Technician

Acquired the Architect's drawings (AutoCAD architectural backgrounds) and applied the specified lighting, and Lutron control systems required for each specific project. Calculated the drop voltage Load schedule(s) in Excel, generated Bill of Material to determine project expenses and the amount of power consumed to ensure regulation compliance. Worked with all Apple store around the world on high end projects such as the Banyan Ridge residence, Litro Gas station among others.

• Sr. Drafter Technician

Prepared detail electrical drawings for installers out in the field. Made modification to architectural, engineering, and electrical original drawings. Prepared routing utilizing AutoCAD and Solidworks as far as the electrical aspect of a project, lighting, fire alarm, and cables, according to its distinct layer. Generated in detail fire alarm drawings (exit signs, speaker strobe, and speaker locations). Also slab drawings showing the conduits run all throughout the slab on that specific floor to its correspondent electrical panel. Telecommunications also, such as cameras, phones and video with their correspondent, also the locations for the CCTV where they need constant surveillance.

United States Air Force – Aviation Engineering Specialist
 Worked closely with aircrafts such as the MIG-29, and F-22 Raptor including the
 ATC. Coordinated with an accounts specialist to perform cost, litigation, and
 production accuracy tests. New guidelines and parts redesign done with AutoCAD.
 Performed layouts in 2D and presentations in 3D. Dealt will all aspects of



Denis Hernandez

Manager

information via the internet/client server. Information Assurance, Client Support Administrator, System Administrator, are just a few skills I was trained on by the Air Force in the carrier Field Information Management.

Drafter III

Received architectural blue prints from contractor, modified the details working with the architect. Extracted the specific molding, fireplaces, pool edge moldings, pilasters, and balustrade system in order to modify them in AutoCAD for final shop production.

Recommend solutions to engineering problems using drafting or mechanical drawing techniques.

Drafter II

Organized drawings provided by sales group; pre-ordered any outsourced material required including, wood, plywood, Formica, beveled edges. Calculated final dimension drawings precision. Prepared any extra orders, extras, and back charges to the salesman, etc. Understand construction specifications. Supervised, coordinated, and inspected the work of draftspersons, technicians, and technologists on construction projects.

Technical Proficiencies

AutoCAD MEP 2000-2013, REVIT MEP 2013 CAD-Elect, Autodesk FAB, Navisworks Manage Adobe Photoshop & Acrobat Dreamweaver, HTML MS Office, Windows 7, 3.1, '95, '98, 2000, XP, Vista Frontier Order Processing Program

Education

Miami Dade College - Pure Mathematics Major
United States Air Force
AS Electrical Engineering
FIU Electrical Engineering
IAS Institute for Advance Study, New Jersey
Information Resources Management Certificate
Information Assurance Certificate
System Administrator Certificate
Records Management Certificate
U.S. Government Information Assurance Regulations Certificate



Dan Huseman

Area Manager

Area of Expertise

Over 34 years' of experience in the industrial electrical construction field.

Career Summary

Current position as Area Manager for the Northwest Indiana operations of Meade Industries, Inc. Responsibility is lead manager of all work within the LU531 and LU697 jurisdictions.

Project Management History

Various projects in the industrial facilities of Northwest Indiana including Praxair, United States Steel, ArcelorMittal Steel, Unilever and others. Current responsibilities include office management, staff management, cost control, cost forecasting, estimating, supervising material flow, development of time and material rates, development of material submittals and shop drawings.

Major Projects

- ArcelorMittal Indiana Harbor: No. 3 Ore Bridge Crane Rail Replacement
- Praxair, Inc. Whiting, IN: 20MMSCFD H2 Plant (SMR #4)
- ArcelorMittal IHE: 13.8KV O/H Transmission Line Inst.
- Praxair, Inc. Whiting, IN: 200MMSCFD H2 Plant (SMR #5 & #6)
- USS SCIP Communications and Data Infrastructure
- Kinder Morgan Bulk Terminals: Coke Handling Facility

Education

Purdue University, B.S., Engineering

Continuing Education

AVO Training Institute, Protective Relay Maintenance

AVO Training Institute, NFPA 70E Electrical Safety

AMP Designing Premises Cabling Systems

AMP Value Added Contractor

Iowa State University, Energy Efficient Lighting Upgrades

OSHA 30

Fall Protection

Confined Space

Rigging Hazard Awareness



Ryan Kersey

Project Manager

Career Summary

Current position as Project Manager for Northwest Indiana operations of Meade Industries, Inc. Responsibilities are estimator and manger of projects within the LU531 and LU697 jurisdictions.

Project Management History

Various projects in the industrial and pipeline facilities of Northwest Indiana including Unilever, Praxair, ArcelorMittal Steel, NIPSCO, Wolverine Pipe Line, and others. Responsibilities include cost control, cost forecasting, estimating, supervising material flow, development of material submittals and shop drawings.

Major Projects

Unilever Home & Personal Care: Ameribars Project

Unilever Home & Personal Care: Soapery Building Demolition Unilever Home & Personal Care: DCS PLC Upgrade Project Kinder Morgan Bulk Terminals: Coke Handling Facility

Education

Purdue University, B.S. Engineering

Continuing Education

AVO Training Institute, NFPA 70E Electrical Safety Eaton Power Quality Tour Program Oracle University Primavera Contractor OSHA 30 First Aid / CPR Fall Protection Competent Person



Dan McCormick

General Foreman

Project Experience

- O'Hare Jet Fuel Upgrade Chicago, IL
 Pipeline Supervisor. PLC and Control Room Installation. Power and Controls to
 Motor Operated Valves.
- BP MCC Upgrades Oklahoma/Kansas
 Completed station upgrade. Control building install. 4160v motor replacements. 4"-1" conduit feeders. Control and PLC wiring.
- BP O'Hare Terminal Chicago, IL S & O Audit Upgrades. Upgraded terminal to Class I, Division I facility. Install pressurization unit in electrical control building.
- NFPA Studies Various Locations across the US ARC flash surveys. One-line diagram verification. Relayed and trip verifications on 4160v switch gear.
- Andrew Corp Relocation Orland Park/Joliet, IL Project Manager/Estimator.
- University of Chicago Chicago, IL Switch Gear Replacement.
- U.S. Cellular Ramp Lighting Chicago, IL
 BP Pipeline High Voltage Service Upgrades Various Locations across the US.
- University of Chicago Chicago, IL
 General Foreman/Foreman/Graduate dormitories Project. Power and distribution. 4"
 & 3" conduit risers.
- Refco Trading Floors Chicago, IL
 Power distribution and lighting feeds. UPS system, computer room. Modular furniture power.
- ComEd Vaults (various locations) Chicago, IL 5kv-15kv feeders. Pull and terminate hi-voltage cables.



Dan McCormick

General Foreman

- Cooper Weld, Inc. (LTV STEEL) Chicago, IL
 700 Ween Mill. Replaced control wiring, 480v feeders. DC rectifiers transformers.
 DC drive units for line motors.
- Electromotive McCook, IL General Foreman. Power feeders, distribution, control wiring, and crane rail installation.
- McCook Metals McCook, IL 16" mill, feeders, power distribution, and control circuiting.
- EMD GM Plant McCook, IL Installation of new 15kv feeders for substations on roof, cable tray installation, 4" rigid feeders, hi-voltage terminations, hi-voltage testing.
- LaFarge Concrete Chicago, IL
 ComEd substation, 6" duct bank for 12kv feeders, switchgear gear house power and lighting feeds, 12kv to 4kv transformer.
- Dekoven Substation Chicago, IL Control wiring and conduits for hi-voltage transformers.
- American Airlines Maintenance Facility Chicago, IL Foreman. Power distribution and mechanical room-boiler room.
- LTV Steel Chicago, IL Coke conveyer, EPA opacity meters on smoke stacks.
- Chicago Mercantile Exchange, Upper Trading Floor Chicago, IL Power feeders and distribution.
- Electro Motive GM Plant McCook, IL 5" duct bank for fiber optics and communication cables. Relocation of various production lines, chip conveyors, Honning mills, overhead cranes, and feeders.
- Zenith Melrose Park, IL 12kv feeders/conveyor system.



Dan McCormick

General Foreman

- O'Hare Airport Chicago, IL
 Foreman. Runway Lighting Install O'Hare Airport. Hi Voltage Lighting Transformer
 wiring.
- Bloomingdales Chicago, IL Apprentice.
- Deep Tunnel, City of Chicago Chicago, IL Fiber optic piping and cable.
- Lyons Electric Lyons, IL Apprentice.
- Sunne Steel Calumet City, IL
- United Cold Storage Hodgkins, IL
- Acme Resin Chemical Company Riverdale, IL
- McCook Barrel and Drum McCook, IL
- Asco Chemical McCook, IL

Education

Electrical Apprenticeship with Local Union 134 of the IBEW

Continuing Education

Local Union 134 Welding Course Updated CPR Training Smith Driving Course Scaffold Training Excavation Training Rigging and Crane Signal Training NFPA 70E Training Trained Hi-Voltage Splicing



Patrick J. Senetar

Senior Electrical Project Engineer

Experience

Meade - McCook, IL

Senior Electrical Project Engineer; Field Startup Engineer BP, Construction Manager/Operations Manager RCA, Construction Startup Coordinator BP, Consultant/Engineer Area Classification/OSHA Compliance/Electrical Studies BP. Constructability Facilitator for Construction, Turnaround, and Maintenance work. Process Unit System Startup and Commissioning Planning and Tracking. Coordinated with Fluor, Jacobs, and BP on OSBL facility construction sequence needs to meet phased commissioning of facilities. Managed 22 Construction Managers handling over 300 Projects / Year. Constructability Consultant for all projects executed by RCA for BP. Integrated Engineering, Construction, Estimating, Scheduling, Quality Control, Safety, and Operations Resources for Project Front End Loading from Appraise-Select-Define-Execute Phases for Projects. Tracked Earned Value and Schedule Performance. Tracked KPI's for Schedule, Cost, Safety for Project Performance. Coordinated Design Efforts with Engineering Firms and Clients. Evaluated Scope and Technical aspects of Client Projects. Prepared material specifications for Client Projects. Coordinated Client Project Scope Changes and Identified Impacts. Assisted with other Technical Electrical Engineering Designs within Meade Developed Project Definition documents, with Scope, Cost, and Schedule. Directed Engineering Firms doing work and tracked performance on deliverables.

BP Amoco – Chicago, IL

• Consultant Desktop Migration, Senior Telecom Specialist, Midwest/Northeast Telecom Project Manager.

Coordinated WAN Upgrades / Changes. Perform WAN traffic studies for utilization. Maintain Plan for WAN growth / migration. Escalation Point for Operational Issues. Project Manager for WAN changes. Changed Board Member to assess WAN impact. Prepared proposals for BP to get quotes. Prepare quote information packages for BP from quotes. Provide technical review of hardware application. Evaluate options for BP connectivity needs. Insure compliance with BP standards. Provide status updates to BP on projects and issues. Assist with Operational troubleshooting of WAN/LAN. Point of contact for Retail and IST groups within BP. Team Leader. Offnet Network hardware configuration and support. Network support for CISCO Equipment. LAN installations / upgrades. Facilities Work - UPS / Power distribution / Wiring. Consultant for development of Desktop Normalization Implementation Manual



Patrick J. Senetar

Senior Electrical Project Engineer

Amoco Whiting Refinery – Whiting, IN

• Project Engineer, Maintenance Engineer, Consultant, and Supervisor Engineering Projects.

Managed Engineers working on over 100 Capital and Expense Projects each year. Total Spending was \$4 - \$12MM each year. Staff of 5 to 15 In house Engineers and Chemists which I directly managed and provided evaluation, training, and development for. Prepared Proposals for Contract Engineering Services and Managed Contract Engineers. Prepared and maintained a 3 year Capital and Expense plan for Electrical, Instrumentation, Process Analyzer, Communications, and Security Projects. Issued Monthly Updates with spending forecast. Evaluated Material Specifications, Vendors, and Construction Methods. Managed Union & Non Union Contractors and determined contract method to utilize based on type of work required. Project work performed was from project definition / scope development, estimate preparation, funding request preparation, design, procurement, construction, and startup. HAZOP review leader for Process Design Changes. Primary Project areas were Electrical Power Distribution, Instrumentation, PLC's, Control, Communications, Process Analyzers, Fire Protection Systems, Video Systems, SCADA, and HVAC/Pressurization. Reviewed OSHA, NFPA, NEC, API documents and prepared Amoco's Site Guidelines for use of these standards documents. Developed standards for Fiber Optics, UPS systems, Fire detection, Grounding, HVAC/Pressurization, and Video Security used in the Refinery. Coordinated maintenance repairs to Electrical Distribution System to be made by in house and contract personnel. Developed and Maintained distribution system records and drawings. Scheduled and supervised relay and distribution system preventive maintenance work. Tracked spending on routine and One Time Expense budgets and requested budgets for Capital improvements needed. Tracked all load growth due to new projects and capacity upgrades. Project Definition/Scope development. Estimating and Capital Funding document preparation. Design and Procurement. Construction oversight and Cost tracking. Startup assistance and Documentation. Material & Labor bid document preparation and evaluation.

Education

Purdue University, B.S. Electrical Engineering



SECTION C: RESUMES-SPACECO

Graycor Proposal Number: 1091467 June 13, 2014



Peter Bator

Senior Project Manager

Areas of Expertise

Design and management of infrastructure, transportation, and industrial, commercial, and residential site development projects for both public and private sector clients.

Career Summary

Supervises support staff including Project Engineers, Design Engineers, and CAD Operators. His duties include project management and preparation of planning studies, project reports, design plans, specifications, grading and utility layout designs, earthwork calculations, construction cost estimates, stormwater management designs, and permit applications. Additional responsibilities include project coordination with other professionals, regulatory compliance, and construction observation.

Project Experience

- City of Chicago
- Fulton Cold Storage
- Harper Court
- DePaul University Academic
- Art Museum
- Wishfield Stadium
- Music Building and Columbia College Media Center

Education

University of Illinois at Chicago, B.S., Civil Engineering

Professional Registration

Professional Engineer, IL (056183) Accredited Professional LEED® (10218584) Illinois Society of Professional Engineers



Jeffrey Julkowski

Senior Project Manager

Areas of Expertise

Career Summary

Project Experience

Responsible for engineering project management and analysis. Duties include performing the following hydrologic and hydraulic engineering tasks: land use characterization, watershed studies, floodplain/floodway delineation, detention and compensatory storage determination, steady state hydraulic analyses, and design of conveyance systems, and stormwater management permitting. Computer modeling experience includes TR-20, HEC-HMS, HY8, HYDRAFLOW, HEC-2, HEC-RAS,

Area of expertise includes water resources and hydrologic and hydraulic engineering.

Industry

• USX- Southworks - Chicago, IL

WSP-2, Info SWMM and XP-SWMM.

Developed a Stormwater Management Plan that uses the site's location and unique characteristics to complement the concept of sustainable development and reduces the impact to both the proposed on-site and existing off-site infrastructure. Stormwater Management Criteria were proposed for 6 zones. Each Zone is defined by a different set of criteria. Criteria are based on: desire to recharge groundwater and convey clean runoff to Lake Michigan, reducing stormwater flow to the City's sewer system and promoting Best Management Practices (BMP's) to reduce and treat runoff. BMP's were used to remove pollutant loading from stormwater runoff for water quality control and to reduce stormwater runoff and to lessen the impact to the existing and proposed infrastructure. Developed a conceptual grading plan and utility plans for watermain and sanitary sewer. Designed infiltration basins, vegetated swales/bioswales and permeable pavers.

O'Hare Modernization Program—Master Drainage Plan – Chicago, IL Project included drainage master planning work for the O'Hare Modernization Program, which will expand and reconfigure the airfield at O'Hare International Airport. Responsibilities included determining the layout of numerous storm sewer systems to collect runoff potentially contaminated with aircraft deicing fluids. Sizing of these systems was done using XP-SWMM modeling software. Responsibilities also included the sizing of three large detention basins, coordination with numerous airfield design projects, and technical support for permitting through IDNR-OWR, DuPage County, IEPA, MWRDGC, and the FAA. Also oversaw preparation of permit submittal to IDNR-OWR for improvements within the Crystal Creek



Jeffrey Julkowski

Senior Project Manager

watershed. Ongoing responsibility includes preparation of overall permitting strategy for City of Chicago Stormwater Ordinance and coordination of City stormwater review process for individual airfield projects.

- Park Ridge Citywide Sewer Study Park Ridge, IL
 Lead engineer for project to develop InfoSWMM model of the entire City's sewer
 system. Project need resulted from repeated severe flooding events in recent years.
 Responsible for coordinating the development of InfoSWMM models for three
 major sewer systems in the City and development of 12 project areas to reduce the
 risk of flooding. Completed benefit/cost analysis. Prepared final report and gave
 presentation of results to City Council.
- Park Ridge Sewer Improvement Program Park Ridge, IL
 Project Manager for follow-up to Citywide Sewer Study. Ongoing project to
 develop conceptual improvements into construction projects. Responsible for
 coordinating InfoSWMM modeling and development of final construction
 documents.
- Village of Lombard Combined Sewer Modeling Lombard, IL
 Project manager for an ongoing analysis of two areas of the Village's storm and
 combined sewer system encompassing approximately 1,900 acres. Runoff from
 these areas is conveyed to various sewer treatment facilities, until those systems
 reach capacity and overflow to the East Branch DuPage River. The project will
 determine the existing system capacities and frequencies of combined sewer
 overflow (CSO) events, with the goal of developing a sewer separation plan that will
 reduce the frequency of CSO's. The analysis uses the XP-SWMM hydraulic model,
 which will be calibrated to recorded rainfall and pipe flow data. After the model is
 calibrated, deficient areas will be identified and a sewer separation plan will be
 developed.
- Riverside Comprehensive Sewer Study Riverside, IL Project Manager to develop an Info SWMM sewer model of the Village of Riverside's entire combined and storm sewer system. Responsible for project management, development of improvement alternatives, project QA/QC and public presentations of study results.
- Homestead Gardens Detention Basin Highland, IN
 XP-SWMM analysis of existing drainage system in Town of Highland, IN. Project
 involved developing XP-SWMM model of area that has experienced repeated
 flooding. Proposed alternative included construction of a flood control basin and
 relief storm sewers.



Jeffrey Julkowski

Senior Project Manager

• Palanois Park Flooding Study – Palatine, IL Project included hydrologic analysis of an existing subdivision to develop alternatives for drainage improvements. The existing storm sewer network and depressional storage in the subdivision was modeled using the XP-SWMM hydraulic model, and was calibrated to match reported flood elevations for known rainfall events. The study was coordinated with an analysis of the sanitary sewer system by SPACECO, Inc., and included several public meetings with the Village and area residents.

Education

University of IL at Urbana-Champaign, B.S. Agricultural Engineering

Continuing Education

Certified Floodplain Manager

IAFSM

FEQ Unsteady Flow Modeling Seminar

National Highway Institute- HEC-HMS Training Seminar

ASCE-Illinois Section EE&WR Technical

Group—XP-SWMM2000 Training Course

Ethics in City Government, Ethics Training for

CDA/OMP Contractors, Vendors & Employees

Professional Registration/Associations

Professional Engineer, IL, (062057976)

Illinois Association for Floodplain and Stormwater Management

Awards

2003 Transportation Project of the Year, over \$10 million, American Public Works Association (APWA), Butterfield Road (South), Lake County Division of Transportation



William B. Loftus

President

Career Summary

Responsible for the overall operations of a +60 person civil engineering and land surveying consulting firm. Provides project management of the technical and administrative aspects of the company. Ssupervises a support staff including Vice Presidents, Senior Project Managers, Project Engineers, Technicians, CAD Operators, Land Surveyors (up to six survey crews), Field and Administrative personnel. Directs projects in the areas of civil engineering, roadway design, site development and analysis, feasibility studies, permit acquisition, and site planning and design. Responsible for directing residential, commercial, industrial site and institutional developments; new parking lots, roads and roadway improvements, utility infrastructure improvements, including the permitting of these projects. Skilled in directing and preparing project reports, planning studies, design plans, specifications, permit applications and construction cost opinions; as well as directing field engineering operations, including site analysis; surface; subsurface and marine exploration programs; land surveying; and construction surveillance. Under his guidance, SPACECO, Inc. has become one of Target Corporation's prestigious Preferred Consultants in the Chicagoland area, and a 2013 NAIOP for Consultant of the year recipient. Provides expert testimony at city councils, plan commissions and court proceedings; and has also served as a guest lecturer for Marquette University College of Engineering, Loyola University Law School, Chicago Public Schools, IEPA's Illinois Brownfield Conference and NAIOP's Mixed Use Summit.

Education

Professional Affiliations/Registrations Marquette University, B. S., Civil Engineering

Registered Professional Engineer (062-046926)
American Society of Civil Engineers
Marquette University Advisory Board for the School of Construction
Engineering Management
Legislative Committee Member
Target Corporation Preferred Consultant
Glen Ellyn Park District Citizens Advisory Council
NAIOP – Commercial Real Estate Development Association



SECTION A: RESUMES-WOLF POINT

Graycor Proposal Number: 1091467 June 13, 2014



Niraj Amin

Vice President of Projects

Areas of Expertise

Over 13 years of material handling and project management experience.

Experience

Wolf Point Engineers

Mechanical Engineering, Estimating and Project Management.
Responsible for mechanical estimates and designs. Performs equipment selection and prices take-offs. Performs system layout drawing work. Assists with proposal development. Performs project management duties. Identifies marketing opportunities and target market. Negotiates and closes contracts. Maintains client relationships and proper communication.

Roberts & Schaefer Company

- Director of India Operations.

 Responsible for setting up the commercial and operational activities of R&S's material handling business in India. Established the local presence and executive relationships among the top power and mining companies in India. Lead estimating team and submitted proposals. Negotiated projects and oversaw project execution
- Project Manager. Developed budget and complete cost calculations. Developed schedule and monitor schedule. Negotiated with the vendors to source major equipment and components. Followed project specification and contract. Directed layout and communicate with customer.
- Layout and Estimating Project Engineer. Performed layout design for various BMH projects. Produced mechanical estimate, obtained and evaluated mechanical quotes. Wrote specification and clarification for proposals. Participated in negotiation meetings.

Education

BBIT, V.V. Nagar, Indian, Mechanical Engineering



Ramesh Amin

Vice President of Estimating

Areas of Expertise

Over 40 years material handling, coal processing, plant design and estimating experience.

Experience

Wolf Point Engineers

Vice President of Estimating.

Performs estimating work and identifies cost savings. Proposal development.

Develops budget estimates. Directs conceptual system layout work. Responsible for equipment and component selection for contracts and estimates. Assists with identifying opportunities and target markets. Assists in the execution of engineering studies.

Roberts & Schaefer Company and KBR

Senior Manager Estimating. Responsible for design and selection of conveyor components. Responsible for selection of equipment like crushers, dust collection, screens, etc. Direct conceptual layout drawings. Check quantity for all disciplines. Direct and check RFQ packages for all components and equipment. Check all quotations and price take offs. Communicate and get price from sub-contractor. Develop estimated project cost.

Lead bulk material handling study projects. Lead project negotiation meetings.

Roberts & Schaefer Company

Senior Project Engineer.
 Responsible for overall system designs. Oversight procurement activities and sub-contractors. Track and update project schedule. Communicate with client. Ensured that project specifications and contract documents are adhered to.

Education

Sardar Patel University V.V. Nagar, India, Mechanical Engineering

Professional Affiliations

Illinois Mining Institute Indiana Mining Institute



Leonard Badal

Senior Mechanical Engineer

Areas of Expertise

Over 42 years of material handling and project management experience.

Experience

Wolf Point Engineers

Senior Associate – Mechanical Engineering.

Supervises all bulk material handling system layout, mechanical and platework engineering and design. Responsible for design adherence to project specifications and site constraints. Reviews all equipment supplier RFQ's and quotes. Reviews all chute-work design for constructability. Responsible for selection of vendor mechanical equipment and conveyor components. Writes operation manuals for material handling systems. Responsible for mechanical engineering for study work. Assists with development of project schedules and proposals.

Roberts & Schaefer Company and KBR

• Principal Mechanical Engineer.

Supervised three departments: Layout, Mechanical and Platework. Maintained communication between all engineering departments. Wrote training manuals for new managers and PM's. Checked supplier equipment for specification compliance. Provided engineering sales support during bidding stage of projects. Performed field trouble-shooting of installed equipment and conveyor. Assisted with development of project schedules.

Wada Engineering

• Project Manager.

Designed and detailed mechanical equipment and conveyor systems at quarries, coal mines and power plants. Produced system layouts and drawings. Interfaced with civil, structural and electrical engineers.

Gold Bond Building Products

• Project Engineer.

Supervised construction of building and installation of a gypsum board manufacturing plant.

Education

University of Baghdad, B.S., Civil Engineering



Andrzej Blizinski

Engineering Manager - Mechanical

Areas of Expertise

Over 16 years of material handling and mechanical design experience.

Experience

Wolf Point Engineers

Engineering Manager – Mechanical
Supervises all bulk material handling system layout, mechanical and platework
engineering and design. Responsible for design adherence to project specifications
and site constraints. Review all equipment supplier RFQs and quotes. Review all
chute-work design for constructability. Responsible for selection of vendor
mechanical equipment and conveyor components. Responsible for mechanical
engineering for study work.

Roberts & Schaefer Company and KBR

• Supervisor – Mechanical Supervision of mechanical platework design. Calculation of mechanical components for all projects. Design feeders, trippers and chute systems. Preparing layout of a new and existing material handling systems. Planning work schedule and designed equipment delivery. Assist with development of project schedules.

Midwest Industrial Packaging, Inc.

Mechanical Engineer
 Design fixtures for line production. Reviews all design components. Solving technical problems during process production.

WSK - PZL Rzeszow - Poland

• Mechanical Designer

Design mechanical parts and components of airplane engines. Implementing technical improvements for process line production. Supervised machining processing parts, assemblies of the components airplane engine.

Education

University in Rzeszow (Poland), Masters, Mechanical Engineering

Professional Affiliations

Member of PAEA



Dave Fong

Senior Vice President and General Manager

Areas of Expertise

Over 30 years of material handling and EPC project management experience.

Experience

Roberts & Schaefer Company and KBR

Vice President of Construction Management
 Oversaw sub-contractor activities at the project site. Communicated with obtained
 pricing from sub-contractors. Determined estimated project cost. Provided input into
 project schedules. Worked closely with V.P. of Project Management to ensure
 constructability of designs. Lead project negotiation meetings. Checked RFQ
 packages for all components and equipment. Checked all quotations and reviewed
 priced take-offs.

Roberts & Schaefer Company

Manager of Projects.

Responsible for overall system design. Oversaw procurement activities and subcontractors. Tracked and updated the project schedule. Communicated with clients. Followed project specifications and contracts.

Major Projects

AES Puerto Rico
Plum Point Energy, Oscela, AR
Sandy Creek Energy Station
Kaltim Prima Coal, Sangatta, Indonesia
AEP Mitchell Station
Consol – Robinson Run
Constellation Energy – Brand Shores
TVA, Kingston Power Plant
Omaha Power Station
Seward Power Station
Lehigh Portland Cement

Education

Southern Illinois University, Associates Degree, Architectural Technology U.S. Army, Illinois National Guard 233rd Engineering Brigade, 1st Battalion, 1971-1977



Jonathan Gilana

Senior Structural Engineer

Experience

Fullerton Engineering Consultants

• Senior Structural Engineer.

Analysis, design and reinforcement of existing and new telecommunication/cellular support structures (self-support towers, guyed towers, monopoles, water towers, buildings, foundations) to comply with governing building and design codes. Preparation of structural sketches and details. Checking and redlining of construction drawings. Communication and resolution of client and construction/field issues.

Valdes Engineering Company

• Senior Civil/Structural Engineer.

Design of steel structures for bulk material handling and conveying systems including: trussed towers, trusses, galleries and bents. Design and analysis of new and existing steel and concrete petrochemical/industrial structures such as pipe racks, auxiliary pipe supports and foundations. Checking of other structural engineers' calculations and RISA computer models. Coordination and direction of CAD designers to generate document drawings via sketches and markups, and checking/back-checking of document drawings.

Roberts and Schaefer Company and KBR

• Structural Engineer.

Design and analysis of steel structures for bulk material handling and conveying systems. Interface and coordination with other internal departments to generate structural steel design drawings for detailing and fabrication use. Utilization of AutoCAD to generate structural steel, civil and concrete design drawings. Served as structural project lead engineer responsible for communication and coordination with other engineers, subcontractors and vendors; mark-up and approval of sub-contractor and vendor drawings. Served as visiting field/site engineer responsible for response to field engineering issues, RFI's, technical queries, and interface with the project owner and sub-contractors. Generation of structural field modification sketches/drawings to solve urgent field engineering issues.

Education

University of Illinois at Chicago, B.S. Civil Engineering Illinois Institute of Technology, B.S. Computer Science

Continuing Education

OSHA 10-Hour Construction Safety

Professional Affiliations

Licensed Professional Engineer, State of IL (NCEES Record No. 55077)



Justin M. Heine, P.E.

Vice President of Engineering

Areas of Expertise

Over 8 years of material handling and structural design experience.

Experience

Wolf Point Engineers

Structural Engineering, Estimating and Engineering Manager
 Overseas all detailed design and engineering. Produces civil and structural estimates.
 Writes engineering and steel detailing proposals. Provides project technical support
 to clients and suppliers. Assists in the conceptual design development for proposals.
 Produces system layout and proposal drawings. Reviews structural steel detail
 drawings. Manages the progress of and assists with engineering studies.

Roberts & Schaefer Company and KBR

Structural Engineer and Estimator
 Produced civil and structural estimates for material handling project bids. Obtained supplier and subcontractor quotes. Wrote specifications, clarifications and proposals. Communicated with clients during bid process. Assisted with conceptual design development for proposals. Produced proposal drawings. Coordinated efforts of estimating department for proposals. Lead the efforts to launch a new in-house developed spreadsheet system for project estimates.

Roberts & Schaefer Company

Lead Structural Project Engineer
 Coordinated and managed structural designs for projects.
 Performed structural steel design and analysis of material handling project structures using hand and computer calculations. Communicated with project owner's engineering team. Provided structural designs and drawings per project specifications. Oversaw sub-contracted and in-house structural engineers. Maintained design phase schedule and kept track of structural budget. Answered fabricator and contractor RFI's.

Education

University of Illinois at Chicago (UIC) B.S., Civil Engineering

Registrations

P.E. License in IL, LA and WA

Affiliations

AISC (American Institute of Steel Construction SEAOI (Structural Engineers Association of Illinois) ISPE (Illinois Society of Professional Engineers)



Kevin B. Hiller

Senior Construction Manager

Areas of Expertise

Over 35 years of construction experience in the mining and material handling industries.

Experience

Wolf Point Engineers

Senior Construction Manager.

Responsible for the entire construction project. Interfaces between and manages the civil, mechanical, structural and electrical subcontractors. Coordinates and schedules all construction activities. Interfaces between client representative, home office engineers and subcontractors. Manages field office, materials and staff. Works with site safety manager to ensure safe practices are performed by workers.

Roberts & Schaefer Company

Construction Manager

Responsible for entire construction projects and managed all subcontractors on-site. Oversaw the complete construction of material handling systems including rail unloading, reclaim, crushing and rail loading at power plants and mines. Responsible for coal preparation plant system construction including vessels, cyclones, thermal dryers and spirals. Coordinated and scheduled construction activities. Ensured projects were completed safely and on-time. Managed field office, materials and staff. Liaison between client at site, home office engineers and subcontractors. Maintained all site records and generated reports.

Key Personal Project Experience

- PT Kaltim Prima Coal Tanjung Bara Facility Coal Handling System East Kalimantan, Indonesia
- AES Puerto Rico Total Energy Plant Material Handling System Guayama, PR
- Reliant Energy Seward Repowering Project Seward, PA
- Baltimore G&E CP Crane Station Coal Handling System Upgrade Baltimore,
 MD
- Teck Coal Elkview Operations, Heavy Media Preparation Plant Expansion BC, Canada
- Sandow Power Company Franklin, TX

Education

Rend Lake College, Welding and Metallurgy



Paul Meifert

Senior Project Manager

Areas of Expertise

Over 30 years of material handling and structural/civil design experience.

Experience

Roberts & Schaefer Company and KBR

Manager of Engineering

Direct operations in all project phases to execute and deliver turnkey, quality engineering. Recommends and administers policies and procedures. Review engineering hours and risk memos in the proposal phase. Work with project team to assist in resolving project issues from design to procurement/fabrication and through the construction stage of projects. Review drawings and engineering documentation for compliance with contract requirements as well as budgetary constraints. Review and provide input in the early project phases to assure value engineering as well as constructability requirements. Provide technical support for field construction managers as well as technical liaison with clients, owners engineers, and contractors in resolving issues. Assist operations management to assess and monitor workload and resources. Direct and implement procedural and execution improvements identified through "lessons learned". Assist with the development of engineering standard guidelines, processes and procedures. Evaluate performance and efficiency of department managers.

Recent Major Projects

- Responsible for Urea Handling System for Orascom Project.
- KPC-1, Melawan Indonesia, EPC project 140,000 ton coal ROM stockpile, two crushing lines (2250TPH each) comprising dump hoppers, feeder breakers, conveyors, divergator, seizer, conveyor, 400 ton surge bin, 9.1km long 4500TPH OLC with two horizontal curves combined with vertical curves, 150 ton surge bin. KPC-2, Sangatta Indonesia, EPC project
- Comanche Expansion Project, Pueblo, CO
- Crystal River Steam Plant, Crystal River, FL
- Chesterfield Power Station, Richmond, VA

Education

University of Illinois at Urbana-Champaign, B.S., Civil Engineering

Continuing Education

OSHA 10

Affiliations

Member of A.I.S.C.

Registrations: Illinois, Indiana, Georgia, Kentucky, Tennessee and Wyoming



Gabor Meszaros, MSc, S.E.

Structural Engineering Manager, S.E.

Areas of Expertise

Over 20 years of experience in design and construction of concrete and steel structures.

Experience

Valdes Engineering Company

Licensed Structural Engineer
Major material handling project, Malaysia. Building design/conveyor support using
Risa 3D. Designed structural steel and connections for member forces per Risa 3D
results. Supervised draftsman and engineers/project design.

Sargent & Lundy

Senior Structural Engineer
 Structural design of large buildings and construction assistance on Fossil Power
 Plant, La Cygne. Composite floor design for DL, LL, EQ loads. Coordination of shop drawings. Checking for design and detailing errors on the Shahfer project in for NIPSCO.

Roberts & Schaefer

Senior Structural Engineer
 Project engineering/engineering/CAD. Design of large structures related to the power
 industry. Concrete and steel structures. Coordinating work of outside
 consultants/subcontractors. Checking design concepts and code compliance. Trouble
 shooting, checking subcontractor's design drawings before construction. Giving
 guidance to younger engineers for design methods and codes. Recommending more
 efficient procedures and solutions for AutoCad and structural analysis.

Education

Technical Univesity of Budapest



RESUME

Timothy H. Wiley, P.E.

Senior Structural Engineer

Areas of Expertise

Over 32 years of material handling and structural design experience.

Experience

Wolf Point Engineers

• Senior Structural Engineer

Performs design and analysis of material handling project structures and buildings. Analyzes 3D models utilizing finite-element software. Produces and checks design drawings. Reviews and approves shop detail drawings. Performs and checks connection designs. Designs foundations and retaining walls. Designs and analyzes steel, concrete, wood and masonry structures. Designs shell structures (silos) & for bulk material storage.

Roberts & Schaefer Company and KBR

• Senior Structural Engineer

Performed design and analysis of material handling project structures and buildings. Analyzed 3D models utilizing finite-element software. Performed steel connection design. Designed shell structures (silos) & hoppers for bulk material storage.

Mero Structures, Inc.

Project Structural Engineer

Designed aluminum support structures for point supported glass canopies, walls and skylights. Used finite element analysis to analyze glass stresses. Checked detail drawings.

Nordberg Sales Co., Fairfield Eng. Co, Galleta Eng. Corp, Jervis B. Webb, Midwest Conveyor Co, Dravo Corp.

• Structural Engineer

Designed material handling structures and foundations. Designed heavy equipment supports and frames. Experience includes structural design for conveyors, crusher buildings, transfers, hoppers, screens, car dumper pits, piling, sheet piling, retaining walls, and more.

Education

University of Virginia B.S., Civil Engineering U.S. Navy Nuclear Power School Graduate

Registrations

P.E. License in KS, IA

Military

U.S. Navy Nuclear Power Program
USS Enterprise Nuclear Reactor Operator, No. 4 Engine Room



SECTION D: PROJECT EXPERIENCE GRAYCOR INDUSTRIAL CONSTRUCTORS INC.

*Includes Meade's Subcontracting Experience











Duke Energy – Integrated Gasification Combined-cycle Facility Edwardsport, Indiana

Construction of a new 630-MW coal gasification plant. Project consisted of constructing a power block structural and mechanical piping system, which included steel erection piping and miscellaneous electrical work. Project scope also entailed an air separation plant, which included steel erection, piping, rotating equipment, insulation, building roofing and siding. Graycor also erected a more than half-mile-long coal handling system, which included steel erection, conveyor and unloading equipment installation, piping and electrical. Centerline scope included installation of GE turbines.

Major Equipment and Scope of Project:

- · Coal Handling System, Air Separation Plant, BOP Mechanical Work, Centerline **Rotating Equipment**
- Structural erection 5,500 tons
- 26 piping modules Average weight 125 tons
- Piping systems 130,000 LF (CS, SS, P91 & P92 Alloy)
- Process equipment Approx. 300 pieces
 - 13 Cameron Compression Systems compressors
 - 2 General Electric gas turbines
 - 1 General Electric steam turbine
 - · 630-MW generator capacity

Self-Performed:

- · Boilermakers
- Pipefitters
- Laborers
- Ironworkers
- Operating engineers
- Carpenters/millwrights Heat tracing
- · Teamsters
- Cement masons

Subcontracted:



- Electrical and instrumentation
- Concrete foundations
- Painting
- Insulation
- · Pre-engineered buildings
- Fire protection

OWNER / CLIENT Duke Energy

PROJECT DURATION 11/2009 - 12/2011

PROJECT VALUE

OWNER'S ENGINEERS

Bechtel, Air Products, River Consulting and Sargent & Lundy

PROJECT DELIVERY APPROACH

General Work Contractor

CONTRACT

REFERENCE

Andy Hayes Sourcing Specialist 812.735.8780



PROJECT SAMPLE graycor.com









Kinder Morgan - Coke Storage and Handling Project

Project Location: Whiting, IN

Owner/Client: Kinder Morgan Bulk Terminals

Contract Value:

Contact: Dynell Jones; 504.620.4626

Project Scope: Civil/mechanical and structural construction for the Coker Material Terminal located at BP's facility in Whiting, IN. Project consisted of two phases: Foundations and underground utilities (CC01), and structural, conveyors and piping (CC03).

Foundations and Underground Utilities (CC01):

Construction Start: 9/1/10
Project Duration: 8 months

Contract Value:

- 182 auger cast-in-place piles:
- 5,200yd³ of poured foundations/pile caps/access ramps (self-perform)
- 3,350 feet of underground piping (self-perform)
- 7,600yd² of Asphalt paving
- · 4,350 feet of new rail

Structural, Conveyors and Piping (CC03):

Construction Start: 4/1/11
Project Duration: 8 months
Contract Value:

- 400 tons of structural steel (towers)
- 2,331 feet of 54" conveyors (10 total)11,500 feet of service piping
- Pump skids / equipment setting
- Commissioning assistanceHeat tracing and insulation
- New MCC room, duct banks and grounding

(self-perform) (self-perform)

(self-perform) (self-perform)



Kinder Morgan also contracted directly with Meade for the power and control to the PET Coke conveyor system from the BP Whiting refinery new 6-drum Coker. Meade also completed all power, controls and instrumentation for the Coke Storage Barn under the Kinder Morgan contract.

CONFIDENTIAL



PROJECT SAMPLE graycor.com









Vulcan Conveyance System and Maintenance Facilities McCook CUP Reservoir

Project Location: McCook, Illinois Engineer: HOH Associates

Owner/Client: Metropolitan Water Reclamation District of Greater Chicago (MWRD)

Summary: The Metropolitan Water Reclamation District of Greater Chicago chose Graycor to install a new rock crushing facility at their CUP-McCook Reservoir located on the south side of Interstate 55 and the Des Plaines River. The design-build project — officially named 'Vulcan Conveyance System and Maintenance Facilities McCook CUP Reservoir' — required Graycor's team to execute the work in an active mine environment, as well as interact and comply with numerous federal, state and local governing bodies and agencies.

The completed project will facilitate construction of a new quarry, which ultimately will become the final reservoir for Chicago's Deep Tunnel Project. Graycor's team was also responsible for designing, fabricating and constructing a conveyor system to remove crushed rock located approximately 120 feet below grade in bedrock. The conveyor stretches nearly one mile under I-55 and the river.

Work also included installing an air release structure, sludge lines, a water main and sanitary line, as well as conveyor bent foundation and transfer tower foundations. Office and maintenance building foundations and construction were also included in the work scope.

CONFIDENTIAL



PROJECT SAMPLE graycor.com









Nacme Steel Coil Processing Facility

Project Location: Chicago, Illinois

Owner/Client: Nacme Steel Processing, LLC

Engineer: Meca Engineering Corporation

Project Completed: 1996

Project Scope: Graycor completed the design and construction of this new 170,000-square-foot, pre-engineered steel coil processing facility. Graycor executed the work for this project utilizing a fast-track, design-build approach. Work scope entailed site development, including fencing, paving, site grading, building pad, curbs, walls, traffic light, utilities, and railroad work.

Graycor's team successfully completed comprehensive design and construction services as well as secured all City of Chicago building permits and zoning approvals within a one-year timeframe through close coordination with the owner, architect, engineer and subcontractors. The plant was turned over on time and within budget.

Additional projects performed for Nacme include installation of equipment foundations and floor slabs on grade (12, 18 and 24 inches thick) in the main production areas, as well as removal of slag beneath the slabs. Graycor also constructed slitter foundations that included sheet pile earth retention for 18-foot-deep concrete pit walls.



graycor.com PROJECT SAMPLE









Strategic Coke Improvement Project – Modules C and D

Project Location: Gary, IN

Owner/Client: United States Steel Corporation

Engineers: Carbonyx Carbon Technologies; Hatch

Project Duration: October 2010 - October 2012

Contract Structure: Lump Sum (Phase I); Fixed Fee Reimbursable (Phase II)

Contract Amount:

Man-hours:

Project Scope: Graycor constructed a new alternative coke-making process facility at U.S. Steel's integrated steelmaking complex located at Gary Works in Gary, Indiana. The two-phased project included performing civil, structural steel (3,300 tons), rebar, concrete, piping and equipment setting. Two module buildings (C and D), totaling 520,000 square feet, were constructed. Work during Phase I, which expended included placing 35,000 cubic yards of concrete for foundations for both modules as well as constructing the C Module building. More than man-hours were expended during the project's second phase construction of D Module building.

The project's logistics included more than 30 barge deliveries and approximately 1,500 truck deliveries of equipment being made during both phases.

It is expected that the completed project will enable the facility's coke production to be 500,000 tons per year and will have a process advantage of low emissions and low energy consumption. The modules will replace 40 percent of the USS Gary Works' coke requirements.



Meade interfaced with the Graycor site staff for project coordination purposes. Furnish and install underground duct backs, medium voltage cable, security and communications systems, fire alarm systems, conveyor lighting, conveyor systems controls.



SECTION D: PROJECT EXPERIENCE MEADE



NIPSCO Michigan City Generating Station

Description: A rebuild of the conveyor system after a fire at the generating station. Meade assisted with design and construction for the project directly contracted with NIPSCO.



Significant Points: New conduit and wire, lighting, power and control to new conveyor equipment, grounding.

INDUSTRIAL PROJECT EXPERIENCE AND REFERENCES (PARTICAL LIST) DOLLAR REFERENCE **PHONE** DATE **OWNER PROJECT NAME** LOCATION **AMOUNT** COMPLETED NUMBER NAME **BP Whiting Refinery** BP Maintenance & Capital Whiting, IN Mike Schwerha On-going 219-473-4130 **Projects** Schahfer, Bailly, Michigan Wheatfield, City Stations Maintenance Nipsco Michigan City, On-going Phil Babin 219-787-7393 work Chesterton Maintenance, turnaround, AnnMarie Lyondell infrastructure upgrade, Morris, IL On-going 713-309-2618 Balthazar capital projects Hydrogen Plant Praxair Hammond, IN 2010 Dave Wilcox 337-515-4673 Exxon Electrical maintenance & Channahon Jeff Pritz On-going 815-521-7616 Pipeline support Maintenance, Support, Annual, Brian U S Steel Gary, IN 219-888-7313 Capital Projects since 1941 Piorkowski Morris, IL Aux Sable Electrical maintenance On-going John Cardone 815-941-5800



SECTION D: PROJECT EXPERIENCE SAFECO



9575 W. Higgins Rd., Suite 700 Rosemont, IL 60018 www.spacecoinc.com

310 N. Liberty Street Morris,IL 60450 www.spacecoinc.com

CHICAGO MANUFACTURING CAMPUS

CLIENT:



Ed Harrington Centerpoint Properties 1150 Spring Lake Drive Itasca, IL 60143 630-773-0050



North of 126th St. between Torrence and Avenue O Chicago, Illinois









The Chicago Manufacturing Campus project was the recipient of the 2004 Phoenix Award for Brownfield Excellence

SPACECO, Inc. designed this 150-acre manufacturing campus to serve suppliers of the adjacent Ford Motor Company Assembly Plant. Innovative engineering methods were implemented to manage the risk associated with the soils remaining on this brownfield site.

CBBEL worked with SPACECO to develop a comprehensive stormwater management plan. The outlet for Wolf Lake (Indian Creek) was realigned as part of the overall development of the supplier park. The outlets for the supplier park drain into Lake Michigan, so Indian Creek was vegetated to provide water quality benefits and habitat for area wildlife. The site was reviewed by City, MWRDGC, State and Federal agencies for compliance with numerous regulations concerning floodplain, stormwater, wetlands and brownfield remediation projects.







9575 W. Higgins Rd., Suite 700 Rosemont, IL 60018 www.spacecoinc.com

310 N. Liberty Street Morris,IL 60450 www.spacecoinc.com

SOUTHWORKS/LAKESIDE DEVELOPMENT

CLIENT:

McCAFFERY Interests

Ed Woodbury-President 875 N. Michigan Avenue Suite 1800 Chicago, IL 60611 312-944-3777



United States Steel



The USS Southworks Facility (450 Acres) Chicago, **Il**linois









The Lakeside Development is one of the largest Brownfield Redevelopment Projects undertaken in the United States. The former U.S. Steel Southworks Plant provided the steel for some of Chicago's best known buildings. The Lakeside Development hopes to reshape the South Chicago neighborhood again by turning this property into a vibrant lake front community with housing, parks, shopping, and entertainment.

Working in conjunction with SPACECO, CBBEL developed a Stormwater Management Plan that uses the site's location and unique characteristics to complement the concept of sustainable development and reduces the impact to both the proposed on-site and existing off-site infrastructure. Ultimately, the CBBEL/SPACECO partnership suc-

cessfully created a Stormwater Framework Plan for the long term development of the site, which was approved by the City and has been used for the initial site development.













PROLOGIS PARK CHICAGO

310 N. Liberty Street Morris,IL 60450 www.spacecoinc.com

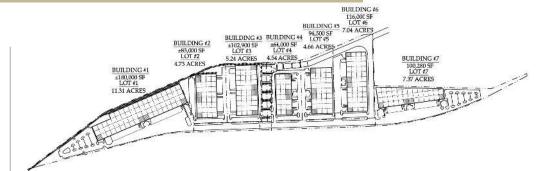
CLIENT:



Prologis James Nass – Vice President 6250 N. River Road, Suite 1100 Rosemont, IL 60018 847-292-3923

LOCATION:

Damen Avenue and I-55 Chicago, Illinois









SPACECO, Inc. was retained by Prologis to prepare turn key engineering design services for an abandoned brownfield in Pilsen. The site was encumbered by challenging geotechnical and environmental issues. The parcel was virtually landlocked from vehicular access and all public utilities. A new public roadway was re-established under an existing railroad viaduct and a utility corridor was created for sewer and water, thus breathing new life into a long forgotten parcel. CBBEL performed the stormwater management design and permitting for Prologis Park to meet the requirements of the City's Stormwater Ordinance. Clean runoff from the roof areas of the buildings, which were designed as green roofs, was conveyed directly to the Sanitary and Ship Canal. Stormwater detention was required for the at-grade portions of the site, and was accomplished through underground storage, surface storage, and an excavated basin. Other best management practices such as permeable pavement and infiltration basins were used as pretreatment measures before discharging stormwater to the Sanitary and Ship Canal.



SENECA I-80 RAILPORT

310 N. Liberty Street Morris,IL 60450 www.spacecoinc.com

CLIENT:



Seneca Railport Keating Resources Gerald Keating-President 719 Shady Avenue Geneva, IL 60134 630-232-4246

LOCATION:

US Route 6 south of the I-80 and Seneca Road interchange Seneca, Illinois



The Seneca I-80 Railport has 1,674 total acres annexed and zoned for industrial and intermodal development, with a 550 acre industrial park supporting over 10 million square feet in new development. A full interchange at I80 is 1.5 miles from the site, and US Route 6 is adjacent. CBBEL worked with SPACECO to develop a stormwater plan for the development. There are numerous waterways that pass through the site before joining the I&M Canal, and each waterway required bridge or culvert crossings to support the development. CBBEL completed the hydrologic and hydraulic analysis for the sizing of these stream crossings, and also developed a plan for a series of naturalized detention basins to store runoff from the site. The locations and sizes of these basins were dictated by the site topography as well as the site plan, and a plan was developed iteratively between CBBEL and SPACECO to achieve a comprehensive stormwater plan that complemented the

