

ABOUT WEAVER BOOS

Weaver Boos is a privately-held consulting firm specializing in environmental, geotechnical, and civil engineering; construction materials testing; and, land surveying. Founded in 1990, the firm has grown to include more than 175 employees, working from nine offices located in six states.

The founding Principals embraced the notion that a successful professional services firm must provide both high quality technical services, *and* attentive, responsive client service. Throughout the company's growth and maturation, the management and technical staff have remained committed to these principles.

Now, nearly fifteen years after its inception, Weaver Boos has established a strong record of accomplishment on many complex projects. Year

after year, the company has earned the majority of its revenue serving repeat clients, and is proud to count hundreds of satisfied clients.

The firm is employee-owned. Every Principal and shareholder continues to work on a daily basis. The firm's success is based largely on the quality of our personnel. Emphasis is placed on identifying and hiring quality people. Efforts are made to create a positive, productive work environment that promotes employee retention satisfaction, and development.



Weaver Boos is comprised of a diverse group of talented professional engineers, geologists, and land surveyors; certified environmental scientists; wetland specialists; and more. Each staff member remains committed to the delivery of quality service on time and within budget.

WEAVER BOOS MANAGEMENT PHILOSOPHY

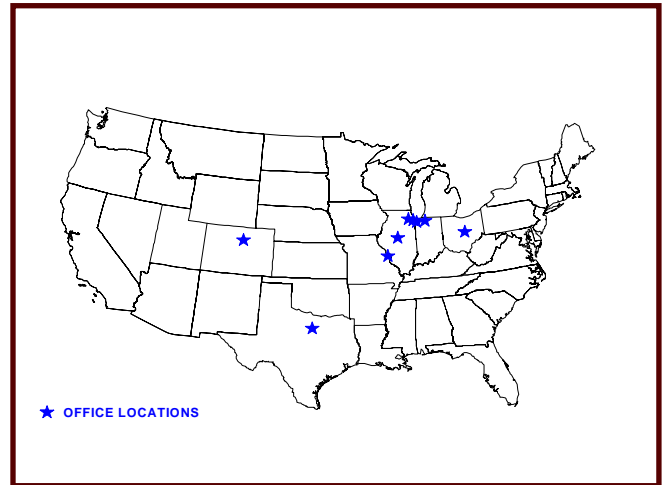
- 1. Our senior personnel maintain an active involvement in project efforts to consistently provide quality services and superior client communications.*
- 2. Our senior personnel are owners of the company and treat our clients with an owner's level of care.*
- 3. We are selective as to which assignments we accept. We are committed to growing in a controlled fashion, allowing us to maintain the quality of our services. Adding new personnel has as its objective the ability to better serve our clients, rather than growing for the sake of growth.*
- 4. We realize that today's purchaser of engineering and consulting services values customer service as a top priority. We continually upgrade our internal management systems to deliver a quality product on time and within budget.*
- 5. We employ a no-nonsense approach to our work. We focus on problem solving and the development of solutions, not on generating endless studies. We are firmly committed to the premise that a good engineering solution is one which satisfies the project requirements in the most cost-effective manner.*
- 6. We work hard to stay current in a rapidly evolving environmental industry. We constantly strive to find better solutions for complex environmental problems. We have been quite successful at applying innovative solutions when justified. However, we carefully consider the alternatives and long-term ramifications. We do not innovate just to be different.*
- 7. We do not have a sales department. Our business development efforts are performed by the personnel responsible for delivering the work product. We rely upon repeat business and client referrals for a majority of our work. This has resulted in our workload being directly related to the quality of the services provided. This approach helps to keep our management focused on the proper areas.*

OFFICE LOCATIONS

Weaver Boos has enjoyed steady growth since its inception. The pace of growth has accelerated since 1999 with the opening of new offices in the Midwest, Southwest, and Western United States.

Weaver Boos provides professional engineering and consulting services from nine offices in six states; most services are provided nationally, regardless of office location. Current office locations are:

- Chicago (Loop business district)
- Naperville (suburban Chicago)
- Springfield, Illinois
- Griffith, Indiana (northwest Indiana)
- South Bend, Indiana
- Fort Worth, Texas
- Columbus, Ohio
- St. Louis, Missouri
- Denver, Colorado



Weaver Boos Office Addresses and Telephone Numbers

Chicago

70 West Madison Street, Suite 4250
Chicago, Illinois 60602

Tel: (312) 922-1030
Fax: (312) 922-0201

West Suburbs

1813 North Mill Street, Suite A
Naperville, Illinois 60563

Tel: (630) 717-4848
Fax: (630) 717-4850

Central Illinois

2021 Timberbrook Lane
Springfield, Illinois 62702

Tel: (217) 787-0290
Fax: (217) 787-0294

Northwest Indiana

1944 Griffith Boulevard, Unit A
Griffith, Indiana 46319

Tel: (219) 923-9609
Fax: (219) 923-9641

Northern Indiana

630 East Bronson Street, Suite 1
South Bend, Indiana 46601

Tel: (574) 232-4826
Fax: (574) 232-4833

Ohio

1335 Dublin Road, Suite 105C
Columbus, Ohio 43215

Tel: (614) 487-8347
Fax: (614) 487-8825

Missouri

801 North Second Street
St. Louis, Missouri 63102

Tel: (314) 621-8140
Fax: (314) 621-8141

Colorado

5675 DTC Boulevard, Suite 102
Denver, Colorado 80111

Tel: (720) 529-0132
Fax: (720) 529-0137

Texas

6420 Southwest Boulevard, Suite 206
Fort Worth, Texas 76109

Tel: (817) 735-9770
Fax: (817) 735-9775

SUMMARY OF CORE SERVICES

Weaver Boos offers a diverse range of environmental, geotechnical, and civil engineering services, construction materials testing, land surveying, and related technical services. These include, but are not necessarily limited to, the following:

ENVIRONMENTAL SERVICES

- Phase I & II Environmental Site Assessments
- Subsurface & Site Characterization Investigations
- Remediation Feasibility & Alternatives Studies
- Remedial Action Plan Development
- Risk-Based Corrective Action Plans
- Environmental Permitting (Land, Air, and Water)
- Regulatory Liaison
- Environmental Compliance Assessments
- Hydrogeologic Investigations
- Groundwater Impact Assessments
- Wetland Identification and Delineations
- Voluntary Site Cleanups
- UST & AST Inspections; Tank Removal Services
- Expert Witness Testimony

SOLID WASTE MANAGEMENT SERVICES

- Landfill Site Evaluation and Selection
- Landfill Design and Permitting
- Transfer Station Site Evaluation and Selection
- Transfer Station Design and Permitting
- Landfill Gas Collection System Design
- Landfill Gas System Installation
- NPDES SWPPP Development
- Landfill Slope Stability Assessments
- Constructed Wetland Wastewater Treatment

LAND SURVEYING SERVICES

- ALTA/ACSM Land Title Surveys
- Boundary Surveys and Monumentation
- Legal Descriptions
- Annexation Plats
- Easement Plats
- Right-of-Way Plats
- Subdivision Plats
- Construction Layout / Staking
- Subsurface Utility Survey and Mapping
- Topographic Surveys
- Wetland Boundary Surveys
- Aerial Survey Controls
- CADD Base Mapping

BROWNFIELD SITE REDEVELOPMENT

- Grant Application Writing
- Identification of Potential Funding Sources
- Project-Specific Funding Strategies
- Stakeholder Collaboration and Planning
- Environmental Insurance Options
- Brownfields Inventory & Prioritization

CONTINUED ON REVERSE SIDE

CORE SERVICES (CONT'D)

GEOTECHNICAL ENGINEERING

- Subsurface Geotechnical Investigations
- Foundation Engineering
- Slope Stability Analysis
- Seepage, Drainage, and Permeability Evaluations
- Failure Analyses

CONSTRUCTED WETLAND NATURAL WASTEWATER TREATMENT SYSTEMS

- Project Feasibility Assessments
- Complete System Design and Engineering
- Design/Build/Operate Options
- Operations & Maintenance
- Utility System Management

CONSTRUCTION SERVICES

- Construction Management
- Construction Materials Testing
 - Aggregate
 - Asphalt
 - Concrete
 - Masonry
 - Soils
- Spray-on Coatings
- Construction Observation
- Structural Evaluations
- Materials Research

CONSTRUCTION MATERIALS TESTING SERVICES

Weaver Boos Consultants is an experienced construction materials testing (CMT) firm. Our CMT services are designed for the client who demands high quality, customer-focused service. Special interest is given to unique and complex CMT projects requiring customized or time-sensitive service. Weaver Boos field technicians are very experienced and supported by a staff of professional engineers. Our laboratories perform ASTM, AASHTO, ACI, CAPP, INDOT, IDOT, and USACE methods. ASTM and AASHTO quality practices are observed.

Aggregate

- Coarse Aggregate Sieve Analysis
- Fine Aggregate Sieve Analysis
- Sulfate Soundness Test on Aggregate
- Unit Weight / Specific Gravity
- Compression Tests Natural Stone
- Clay Lumps & Friable Particles
- Deleterious Materials (Various)

Asphalt

- Air Voids
- Asphalt Extraction and Gradation
- Density / Specific Gravity
- Marshal Test (Stability, Flow, Density)
- VMA (Voids, Minerals, Aggregate)

Concrete

- Compressive Strength of Concrete Cylinders
- Compress. Strength of High Strength Concrete
- Split Tensile Strength of Concrete Cylinders
- Compression Test on Concrete Core Sample
- Lab Testing of Aggregate for Mix Designs
- Air Content
- Concrete Slump
- Flowable Fill (CLSM)
- Flexural Strength
- Concrete Floor Flatness Testing
- Unit Weight / Light Weight

Soils

- Atterberg Limits (Liquid & Plastic)
- Bearing Ratio of Lab-compacted Soils
- Cohesive Soils, Failure Stress at Max Strain
- Triaxial, Falling Head, and Constant Head Permeability Testing
- Moisture-Density Relation of Soil (Std./Mod.)
- Nuclear / Sand Cone Field Density Testing
- Particle Size Analysis of Soils
- Specific Gravity of Soils
- Unconfined Compressive Strength of Soil
- One-dimensional Consolidation Testing
- Triaxial Compressive Strength Testing
- Lab Determination of Moisture Content
- Moisture, Ash, and Organic Content
- Visual Classification
- Direct Shear Testing of Soils

Masonry

- Compression Testing:
Mortar Cubes, Grout Samples, Masonry Prism
- Brick Moisture, Absorption Test
- Brick Comparison Test
- CMU Moisture, Absorption, Weight Test
- CMU Compression Tests

Spray-on Fire Coatings

- Field Thickness Measurements
- Adhesion / Cohesion
- Density
- Ash Content

SELECT PROJECT EXPERIENCE

NOTABLE PROJECTS

- 900 North Kingsbury Renovation and Addition
- 950 North Kingsbury Parking Garage
- Indiana State Prison
- Elkhart County Correction Center
- 31st Street Lake Front Revetment Construction
- Nordstrom, North Michigan Avenue, Chicago
- Stevenson Expressway Reconstruction Project
- Washington National Airport Renovation
- O'Hare Airport Terminal Renovation
- Midway Airport Security Gate Construction
- Gary/Chicago Airport Runway Expansion
- Michiana Regional Airport
- Navy Pier Reconstruction
- Sears Tower Renovation
- River Oaks Expansion
- Franklin/Lake Self-Park
- One North Franklin
- American Medical Association World HQ
- 900 North Michigan Avenue
- 35 West Wacker Drive
- Illinois River Energy Ethanol Plant
- Central Illinois Energy Ethanol Plant

LAND SURVEYING SERVICES

Weaver Boos Consultants employs a dedicated team of Land Surveyors licensed to practice in Illinois, Indiana, Wisconsin, and Texas. These professionals are well equipped and committed to providing our clients with accurate surveys on time and within budget.



Trained and experienced field technicians working under the guidance of licensed surveyors utilize the latest technology including GPS (Global Positioning Satellites), electronic measuring instruments, and the latest CADD software to generate precise surveys in a timely and efficient manner.

Weaver Boos is prepared to accept our clients' most challenging projects using our competent, experienced, efficient, and innovative survey team. In addition to surveying, Weaver Boos can provide a variety of environmental and geotechnical engineering services, as well as construction materials testing. By providing many bundled site development services, Weaver Boos can help our clients be more efficient and discreet when evaluating potential land acquisitions, by eliminating the headaches and cost of working with multiple subcontractors. A

partial list of land survey services offered by Weaver Boos includes:

- Boundary Surveys
- A.L.T.A./A.C.S.M. Land Title Surveys
- Topographic Surveys
- Construction Layout
- As-Built Surveys (Record Drawings)
- Subdivision Plats
- Annexation Plats
- Easement Plats
- Right-of-Way Plats
- Legal Descriptions
- Aerial Photo Control
- Tree Location Surveys
- Utility Mapping
- CADD Base Mapping
- Wetland Location Surveys



SELECT PROJECT EXPERIENCE OF MR. MICHAEL BYTNER*

Glenview Naval Air Station Redevelopment

Survey Project Manager

Responsible for subdividing the Glenview Naval Air Station (GNAS) control tower unit into the following major components of the GNAS Redevelopment project.

- Glen Town Center - (Oliver McMillan)

Retail redevelopment of the main air traffic control tower. Included anchor stores Von Maur & Galyans as well as a multi-cinema and multi-zoned parcels that defined both residential and retail use parcels by air rights.

- South Gate on the Glen - (Edward R. James)

Special use P.U.D. of more than 200 units of high-end residential single-family & multi-family dwellings in a golf course setting.

CenterPoint Properties Asset Divestiture Project

Survey Project Manager

Coordinated subcontracting and execution of more than 60 ALTA surveys of properties located in Illinois, Indiana, and Wisconsin. Project required completion within a 45-day time frame. Weaver Boos self-performed nearly 30 surveys, and subcontracted the remainder to qualified surveyors in other states.

* A few projects listed were completed while employed by other firms.

Carillon & Carillon Lakes (Cambridge Homes)

Survey Project Manager

Responsible for platting and development of surveying for multiple units at a resort golf course retirement community in Plainfield, IL.

Three Lakes Business Park

Survey Project Manager

High-profile retail and entertainment complex including hotels, fine dining, lifetime fitness, kinder care, and open space for recreation and nature conservancy.

Creekside of Algonquin (Pulte Homes)

Survey Project Manger

Performed all surveying tasks associated with a high-end multi-phase residential development of both single and multi-family home sites situated amidst a large open space wetland conservation area.

Fox Lake Crossing (Great Lakes Principals)

Survey Project Manager

Retail complex featuring Dominick's Fresh Store, gas station, and other commercial/retail establishments.

Weaver Boos provides professional geotechnical, civil, soils, and foundation engineering services for a diverse range of projects. Field and laboratory services are also available for engineering and construction materials testing. Together, these services, not often available through traditional environmental or geotechnical services providers, offer a competitive cost advantage for our clients executing multi-faceted assessment and construction projects.

Weaver Boos personnel are very experienced in conducting subsurface explorations and providing foundation recommendations for both shallow and deep foundation systems. Across the firm, all senior geotechnical engineers possess more than 15 years of practical experience. Our construction experience allows us to develop recommendations which are not only technically appropriate, but cost-effective to construct as well.

Weaver Boos personnel have participated in numerous challenging and unique projects. The company's ability to provide cost-effective engineering solutions for our clients, pragmatic in most cases and highly innovative when called for, is the foundation of our success. A partial list of our geotechnical engineering services includes:

Feasibility/Planning Phase

- Site Suitability Evaluation
- Preliminary Subsurface Exploration

Design Development Phase

- Subsurface Exploration
- Laboratory Testing of Subsurface Materials
- Foundation Consultation
- Embankment Design
- Erosion Control Design
- Slope Stability Analysis
- Lateral Retention System Design
- Earth Dam and Levee Design
- Fill Material Evaluation
- Groundwater Hydrology
- Permanent Dewatering System Design
- Pavement Design
- Machine Foundation Analysis
- Seismic Engineering
- Tunnel and Shaft Analysis
- Specification Preparation or Review

- Dynamic Compaction Design
- Surcharge Design

Construction Phase

- Earthwork Monitoring
- Design / Installation of Instrumentation
- Pile Driving Monitoring
- Caisson Installation Monitoring
- Augured Cast-in-place Pile Monitoring
- Dynamic Compaction Monitoring
- Evaluation of Materials
- Construction Dewatering Evaluation
- Surcharge Monitoring / Instrumentation
- Vibration Monitoring / Instrumentation
- Inclinator / Lateral Deflection Monitoring and Instrumentation

Post-Construction Phase

- Failure Investigation
- Foundation Underpinning Consultation
- Expert Testimony
- Landslide Remediation



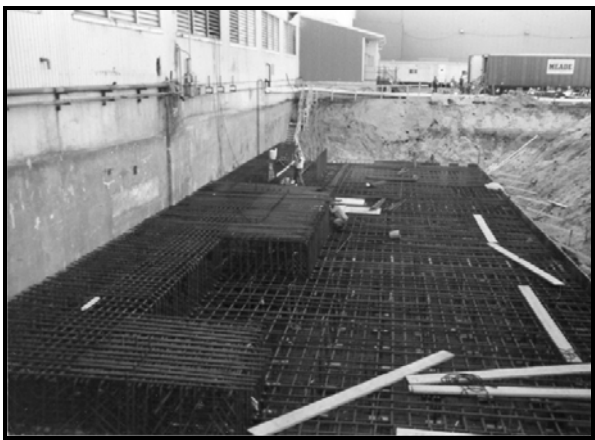


GEOTECHNICAL ENGINEERING

The cornerstone of Weaver Boos' successful philosophy is our commitment to client satisfaction. Regardless of the complexity of the engineering problems, a project is not complete, nor successful, until our client is satisfied. As a result, more than 75% of our work comes from repeat clients.

A proper understanding of the geotechnical properties at a site is fundamental to the success of most civil engineering projects. Given today's litigious business environment, some engineering firms tend to turn routine work into research projects.

Weaver Boos does not. Our staff is knowledgeable and experienced with construction and construction management experience, having constructed many of our own designs in the field. This experience allows us to develop recommendations that are technically appropriate and cost effective.



SELECT PROJECT EXPERIENCE

Foundation Design

Weaver Boos personnel performed a geotechnical site investigation for a \$300 million continuous caster at US Steel, Gary, Indiana Facility. Analysis included assessing load capacities of large H-piles installed to bedrock, shallow foundations for the lightly loaded structures, and stability of a 55-foot deep scale pit over potentially heaving, soft "Lake Clays," and dewatering designs.

Dynamic Compaction/Off-site Monitoring

Weaver Boos monitored soil improvement by dynamic compaction during reconstruction of the Stevenson Expressway in Chicago. The design included the use of isolation trenches to protect existing structures in the congested urban area. The project included 18 soil borings, pressure testing to determine in-situ soil properties, and installation of four piezometers. Weaver Boos managed all vibration and noise monitoring activities.

Subsurface Geotechnical Investigation

Weaver Boos performed soil and rock borings to obtain data for shallow and deep foundation design for a proposed ethanol plant located on an old surface mine site. Recommendations included supporting lightly loaded structures in the natural ground area on a loess deposit and all settlement sensitive structures in the mined area on pile foundations. Alternative designs for heavily loaded structures included the use of geo-piers.

Forensic Investigation – Slope Failure

Weaver Boos was retained to study a slope failure at a restricted waste landfill in Indiana. The investigation looked at the original landfill design, local geology, waste characteristics, cell construction, and operating practices. Field and laboratory geotechnical testing were provided. Weaver Boos determined that inconsistent operating practices led to the landfill failure, and was retained to design and oversee construction of a new landfill.

DUE DILIGENCE: ENVIRONMENTAL SITE ASSESSMENT SERVICES

CLIENTS AND INDUSTRY EXPERIENCE

Weaver Boos Consultants provides transactional due diligence and environmental site assessment services for real estate transactions occurring throughout the United States. A partial list of typical clients includes:

- Attorneys and Law Firms
- Commercial Real Estate Developers
- Property Management Firms
- Real Estate Investment Trusts
- Local, Regional, and National Financial Institutions
- Insurance Companies
- Municipalities and Government Agencies
- Public and Private Manufacturing Companies
- Not-for-Profit Community Organizations
- Agricultural and Chemical Facilities
- Health Care and Medical Waste Facilities
- Solid Waste Companies
- Steel Producers

Weaver Boos is regularly exposed to large and complex financial transactions involving land acquisitions. We understand that environmental due diligence is only one of many issues that the selling and buying parties must attend to. We listen to our clients, strive to understand the unique needs and constraints of every transaction, and tailor our services and approach to the key concerns of our clients. We can assemble a project team, including subcontractors, with the skills and experience necessary to complete the project in a timely and cost-effective manner. We try not to overemphasize our involvement.

Our philosophy is to take a pragmatic approach to each site assessment using our knowledge and experience. When called for, we can be very innovative; however, we realize that due diligence often must be completed within a limited timeframe. Our clients can rely on our experience. Timely and cost-effective services result in favorable referrals and repeat business.



SITE ASSESSMENT SERVICES

Environmental site assessment and due diligence services provided by Weaver Boos includes:

- Phase I ESAs (ASTM E 1527)
- Phase II ESAs
- Client and/or Project Tailored ESAs
- Non-Scope ESA Considerations such as:
 - Asbestos and Lead Sampling
 - Mold Sampling and Evaluations
 - Radon Sampling
 - Lead in Drinking Water Sampling
 - Wetlands and Endangered Species
 - Regulatory Compliance Reviews
 - Indoor Air Quality Sampling
- Soil and Groundwater Remediation
- Remedial Cost Evaluation and Quantification
- Evaluation of Business Environmental Risk
- Geotechnical Subsurface Investigations
- Land Surveying
- Multi-Media Compliance Auditing
- Environmental Insurance
- Expert Witness Services



THE WEAVER BOOS APPROACH

Years of experience put to work for you...

Weaver Boos is a full-service professional engineering and environmental consulting firm widely recognized for our unique ability and experience with ESAs and the due diligence process.

We have performed numerous multi-phase ESAs in connection with land development projects, property transactions, and corporate acquisitions.

Our professionals strive to understand the ever-changing pressures facing lending institutions, purchasers, sellers, investors, and other participating parties when evaluating property transactions.

Successful transactions satisfy clients. Our services are tailored to provide the necessary expertise for each project to enhance our clients' understanding and decision-making. Our experience helps us to identify means to solve deal-breaking problems, when desired.

Our experience suggests most environmental risks are manageable. Although such risks can rarely be completely eliminated, we understand that a cost-effective due diligence process can allow for successful completion of projects to the mutual benefit of all parties.

Why Weaver Boos? We work hard to offer both pragmatic and innovative solutions for our clients. Our corporate culture demands uncompromising integrity from our staff. Together, these goals help us to be **Client-Focused & Quality Driven.**

WHY WEAVER BOOS?

Client-Focused & Quality Driven

Our goals are to simplify the environmental due diligence process, consistently deliver above-average work product on time, and exceed our clients' expectations on each and every project.

Weaver Boos Consultants has a staff of more than 60 degreed professionals, including: environmental, geotechnical, and civil engineers; professional geologists, hydrogeologists, scientists, regulatory permitting and compliance specialists (air, land, & water); and, professional land surveyors, supported by more than 80 technical and administrative positions.

As a professional services firm, Weaver Boos strives to provide innovative and reliable site assessment services in a cost-effective manner. Additionally, we want to help our clients avoid unnecessary financial exposure, and minimize environmental liabilities.

We have delivered successful solutions for clients of all types, from private individuals to small businesses, from not-for-profit organizations to large international corporations, from small manufacturers to heavy industry, and the financial institutions that serve them.

Weaver Boos' success is demonstrated by 15 years of quality service and sound financial management. This solid record enables the firm to hold E & O and Comprehensive Environmental Liability insurance.



SOLID WASTE FACILITY ENGINEERING

Weaver Boos is known nationally for its municipal solid waste engineering services. Everyday the firm is involved with projects involving site selection, facility design, permitting, and construction of proposed, new, and existing landfills; assisting clients with assessment of current designs, identification and engineering of potential improvements, modification of permits, and construction management. Because we work at many landfills and transfer stations, located in many states, our collective experience keeps us well prepared for new and unique challenges.

Weaver Boos engineers and technical personnel are extremely knowledgeable regarding RCRA Subtitle D standards, as well as many state-specific variations. Additionally, company personnel have successfully permitted, designed, and witnessed construction of a Subtitle C hazardous waste landfill – one of only a handful located in the Midwest.

The company has experience shepherding numerous pre-RCRA landfills and Solid Waste Management Units (SWMUs) through a myriad of Federal and State cleanup programs: RCRA Corrective Action, Superfund, Illinois SRP, Indiana VRP, Ohio VAP, etc. Company principals have provided successful expert witness testimony for many of these projects.

The efforts required to site and permit landfills or expansions are complex and technical. Weaver Boos personnel are experienced communicating with regulators and citizens' groups - testifying, presenting facts, or explaining engineering designs. Although siting requirements are usually both state and location-specific, a general list of our services includes:



Site Assessment

- *Local zoning/siting support*
- *Hydrogeologic assessment*
- *Wetlands delineation*
- *Endangered species evaluation*
- *Geotechnical assessment*
- *Surface hydrology evaluation*
- *Operational constraints review*
- *Buffer zone impacts review*
- *Site development projections*
- *Ecological assessments*

Landfill Design/Permitting

Weaver Boos has designed many landfills in the Midwest and Southwest. Our design, drawings, specifications, CQA plans, and related work have with stood rigorous review by state and federal agencies. Our design services include the following:

- *Design plans and specifications*
- *Design narrative addressing permit requirements*
- *Environmental control procedures*
- *Final cover and end use*
- *Closure and post-closure*

Landfill CM / CQA Services

Construction Management (CM) and Construction Quality Assurance (CQA) are two very important components of our landfill services. A landfill is expensive to build and must be built right; synthetic liners further complicate construction. In the last five years, Weaver Boos has managed the installation of more than 200 acres of Subtitle D landfill liners. Our CM experience helps us to design cost-effective and buildable landfills. Our services include:

- *Contract and bidding documents.*
- *Contractor and bid evaluation.*
- *Scheduling, cash disbursement, and cost analysis*
- *CQA services including inspection and testing.*
- *Progress payment evaluation.*
- *Regulatory agency contact.*
- *Changed conditions evaluation.*
- *Design modification and shop drawing review.*
- *Preparation of CQA documentation and other pre-operational requirements.*

Experienced CQA personnel are necessary to ensure that a landfill is constructed in accordance with its permitted design. Our project managers and field personnel are very experienced providing CQA services for:

- *Soil liner and soil cover*
- *Geosynthetics construction including geotextiles, geocomposites, and geosynthetic clay liners*
- *Leachate collection systems including drainage media, piping, and collection sumps*
- *Landfill gas management system including construction of extraction wells and piping.*

Weaver Boos personnel are very knowledgeable of the federal, state, and local regulations that typically impact siting, permitting, design, and construction of landfills. Years of experience, and years of working side-by-side with many regulatory agencies, prepares us to perform these services. Our reputation for honesty and integrity has in many cases allowed us to obtain permits and operating approvals in less time than typically required, which highlights our commitment to the quality of services we provide to our clients and our relationship with state agencies.

Landfill Post-construction Services

Our post-construction services include the required monitoring functions and management of closure and post-closure plans. The specific tasks can include some or all of the following:

- *Final cover installation monitoring*
- *Volumetrics/Waste density analysis*
- *Groundwater monitoring*
- *Landfill gas monitoring*
- *Operations compliance monitoring*
- *Settlement monitoring*

Of notable interest, Weaver Boos has successfully modified existing groundwater detection monitoring programs using advanced statistical procedures approved by the USEPA. These procedures increase the confidence level of the system and lower the false positive rate without reducing the sensitivity of the detection program. Implementation of these modifications has resulted in substantial cost savings for our clients.

Design, Siting,
and Permitting
for MSW
Transfer Stations



CQA for
MSW Facility
Construction

Landfill Liner
Certifications

Minor Repairs Services
thru Landmarc



Automated Leachate
Removal and Tank
Storage System
Design and
Installation Services

Leachate and
LFG Piping
Systems –
Turnkey
Installations



Design/Build and
Installation of
LFG Flares w/
PLC and
Telemetry Uplink
Systems

COMMERCIAL/INDUSTRIAL SITE REDEVELOPMENT

BROWNFIELDS

By USEPA's definition, "Brownfields" are under-utilized properties with an environmental stigma hindering their redevelopment. The property may either be contaminated in some manner, or it may merely appear to be contaminated due to its location, physical condition, or historical use. Brownfields are as common as old gasoline stations, old buildings burdened with asbestos and lead-based paint, or large abandoned industrial complexes with varied histories.



BEFORE

The Brownfields Initiative Act of 1995, and Brownfields Revitalization Act of 2002, created federal programs to help states and municipalities redevelop such properties and return them to productive use thereby creating jobs, encouraging redevelopment of blighted neighborhoods, and stimulating property tax revenue. These programs have proven effective throughout the nation. Because of these programs, municipalities and local governments have completed many highly visible projects utilizing public funds. However, many brownfields are also being redeveloped solely through private initiative and funding.

Weaver Boos has been involved with brownfield redevelopment projects long before the term became commonplace, primarily working with private developers. The scope of these projects influenced the company's growth and mix of services offered so that today the company's capabilities are particularly well suited to handle complex brownfield projects. This mix of services includes:

- Preparation of state funding grant applications;
- Phase I and II Environmental Site Assessments;
- Subsurface geotechnical explorations to assess site suitability for redevelopment;
- Environmental engineering and consulting services - comprehensive knowledge of state brownfield programs in IL, IN, and MO;
- Risk Based Corrective Action (RBCA) investigations to assess site closure options;
- Experience with site demolition activities;
- Design and installation of engineered barriers, and development of institutional controls;
- Geotechnical engineering for foundation design;
- Licensed land survey, platting, drainage, and grading plans as well as other surveying tasks necessary for construction;
- Wetland determination, delineation, and mitigation design;
- Environmental Permitting;
- Environmental Insurance; and,
- Expert Witness Services.



AFTER

Weaver Boos has conducted remedial assessments and corrective action measures at large and small sites throughout the Midwest. Our extensive involvement with brownfield projects has allowed the firm to develop "turnkey" capabilities. Our staff of professional engineers, geologists, and land surveyors; environmental and regulatory compliance specialists; and, experienced field technicians are capable of guiding single and multiple-property projects from inception to site delivery to the construction contractors.

Weaver Boos has experience managing a variety of environmental remediation and risk-based regulatory closure projects. Our experience includes sites impaired by one or more of the following contaminants:

- Volatile organics including chlorinated solvents
- Semi-volatile organics and petroleum hydrocarbons
- Manufactured Gas Plant tars and sludges
- Wood treatment chemicals and byproducts
- Pesticides and/or herbicides
- PCBs
- Heavy metals such as Lead, Arsenic, and Cadmium

Typical clients served include:

- Attorneys and Law Firms;
- Commercial Real Estate Developers;
- Insurance Companies;
- Light / Heavy industrial firms including railroad, steel manufacturers, and Ag Chem companies;
- Municipalities and Governmental Agencies;
- Property Management Firms;
- Real Estate Investment Trusts; and,
- Regional and National Financial Institutions.

OUR PHILOSOPHY

Our experience has taught us that every brownfield presents unique characteristics. Therefore, it is very important to understand our client's ultimate goal with respect to the site's planned end use. We listen carefully, try to understand business objectives, and develop for discussion a range of potential options and solutions. Our personnel are encouraged to be pragmatic and offer the simplest solution first. We always strive to identify the most timely, cost-effective means to achieve our clients' objectives while working within project constraints. We let unique project requirements drive the need for innovation.

Weaver Boos personnel know the brownfield programs, and have strong working relationships with key agency personnel, which enable us to move sites through the programs in a timely, efficient, and cost-effective manner. We understand how to utilize the flexibility within the applicable regulatory programs to deliver projects on time and within budget.

BEFORE



AFTER