

**Expression of Interest** 

# Mapping and Design Services for Carson One Mining and Glady Fork Mining Permits

### Submitted to:

Department of Administration, Purchasing Division Department of Environmental Protection- AML 2019 Washington Street, East Charleston, WV 25305

Buyer: Frank Whittaker Solicitation No: DEP16488 Sid Open: June 11, 2014 Sid Open Time: 1:30 PM Fax: (304) 367-9403

> 06/04/14 09:16:43AM West Virginia Purchasing Division









Stantec Consulting Services Inc.

111 Elkins Street Fairmont WV 26554 Tel: (304) 367-9401

June 11, 2014

West Virginia Department of Administration, Purchasing Division WVDEP-Office of Abandoned Mine Lands 2019 Washington Street, East Charleston, West Virginia 25305-0130

Attention:

Mr. Frank Whittaker, Buyer

Reference:

Expression of Interest for Mapping and Design Services for Carson One Mining and Glady Fork Mining

**Permits** 

Dear Mr. Whittaker,

Stantec is pleased to respond to the Expression of Interest request for the Multiple Permits Design Project. Prepared in our expression of interest, you will find an abundance of information that describes in detail our qualifications and experience. The information includes a statement of our qualifications, personnel summaries and project experience to reflect the broader scope of services identified in your EOI.

Stantec has two office locations in West Virginia at Fairmont and Charleston. We also have a Material Testing lab in Buckhannon, WV. The Fairmont office is readily available to provide engineering services on this Project. Stantec can allot three (3) design teams to this project. Each design team will have necessary support personnel including CADD Operators, Staff Engineers, Survey Crews, and other support personnel to ensure the project is completed within WVDEP timeframes.

Stantec has project specific experience successfully completing projects for the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands (WVAML) Program; for the West Virginia Department of Environmental Protection, Office of Special Reclamation; for the Ohio Department of Natural Resources (ODNR) AML Program; and for the West Virginia Conservation Agency. In addition, Stantec has employee project-specific experience completing additional Projects for the WVAML Program.

We are very excited about the opportunity to continue our working relationship with the West Virginia Department of Environmental Protection and look forward to providing engineering services on this most important project. We believe no other company can meet our quality of work, which, when coupled with our experience, allows us to be more efficient and therefore very cost competitive. Our Fairmont Office will respond quickly, effectively, and in the most economical way.

Should any questions arise, or if we can supply additional information or be of further service to you, the Purchasing Division, or the West Virginia Department of Environmental Protection, please contact me anytime at (304) 816-5190.

Respectfully Submitted,

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STANTEC CONSULTING SERVICES INC.

Richard L. Gaines, Project Manager

Tel: (304) 816-5190

Richard.Gaines@stantec.com

# Professional Engineering Services

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## Stantec Qualifications

### Design with community in mind

We're active members of the communities we serve. That's why at Stantec, we always design with community in mind.

The Stantec community unites more than 13,000 specialists working in over 200 locations. We collaborate across disciplines and industries to make buildings, infrastructure, and energy and resource projects happen. Our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships.

Since 1954, our local strength, knowledge, and relationships, coupled with our world-class expertise, have allowed us to go anywhere to meet our clients' needs in more creative and personalized ways. With a long-term commitment to the people and places we serve, Stantec has the unique ability to connect to projects on a personal level and advance the quality of life in communities across the globe. Stantec trades on the TSX and the NYSE under the symbol STN.

More than our services, we are defined by what we stand for, what we believe, and why we do what we do.

By connecting the focus of our work with our deep commitment to community and the unique insight we bring to every project, our promise lets employees, clients, and investors know exactly what we do and what we stand for.

### We put people first

Our people remain at the core of what we do. We want our employees to succeed, however they define it—from accomplishing stimulating, challenging work to becoming leaders in their fields and communities. We are committed to support, foster, and invest in individual success through a culture of opportunity, mentorship, and innovation.

### We do what is right

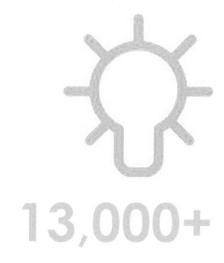
A company's reputation centers on its integrity. The way we treat our people, clients, and neighbors reflects who we are, what we believe in, and how we do our work. Our commitment to doing things right is evident in everything we do, from professional excellence in our project work to taking responsibility for projects within our communities.

### We are better together

Strong, long-lasting relationships directly impact the success of our employees, clients, projects, and communities. We will reach our full potential as an organization and as trusted advisors for our clients only when we combine our unique strengths and passion.

### We are driven to achieve

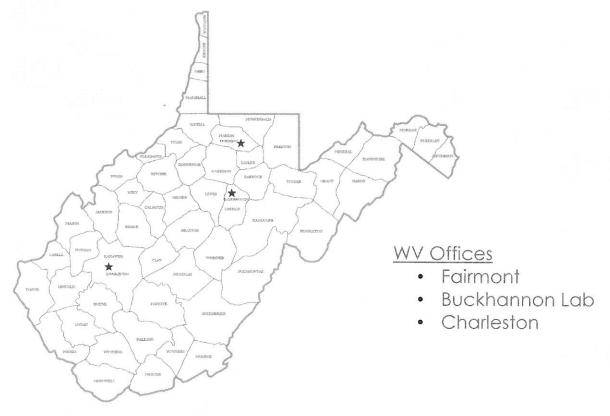
Achievement at every level begins and ends with a firm commitment to being the best we can be. We are committed to becoming and remaining a top10 global design firm. It's an ambitious goal, but it's one we take seriously. In order to achieve our Top 10 objective, we recognize our key challenge is to maintain the stability and strength of our local relationships while balancing the management of growth projections.



specialists working across disciplines and industries to make buildings, infrastructure, and energy and resource projects happen.

# Local Capabilities

The West Virginia offices of Stantec has approximately forty employees combined. We believe we have the required professionals to meet your needs here in West Virginia. However, at Stantec we also have the experience of over 13,000 professionals available as well.



Stantec has project specific experience successfully completing projects for the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands (WVAML) Program; for the West Virginia Department of Environmental Protection, Office of Special Reclamation; for the Ohio Department of Natural Resources (ODNR) AML Program; and for the West Virginia Conservation Agency. In addition, Stantec has employee project-specific experience completing additional Projects for the WVAML Program. Our AML project experience includes surveying and mapping; access road design; subsurface investigations; groundwater and surface water testing and analyses; wet mine seals and modified wet mine seals with bat gates design; vertical shaft cap design; mass balanced earthwork quantities; structure demolition and removal plans; site drainage design including hydrologic and hydraulic studies for bridges, natural stream design; channels, ditches, pipes and box culverts; civil site design; sediment control; and revegetation plans as well as construction plans and specifications. Some of our projects also involved passive acid mine drainage designs ranging from simple limestone beds to complex interactive systems that boost AMD pH to precipitate metals, settle and filter dissolved metals, and polish effluent water with alkalinity prior to release of near neutral waters from the project area. In addition, Stantec designed the first active alkaline treatment system for the State of West Virginia (Special Reclamation).

The Fairmont office is also proud to offer these additional services:

<u>Design Services:</u> Highway, Bridge, Water & Wastewater (Treatment & Distribution: Water; Collection: Sewer), Sidewalks, Site work

Materials Testing Lab: Concrete, Soils, Asphalt

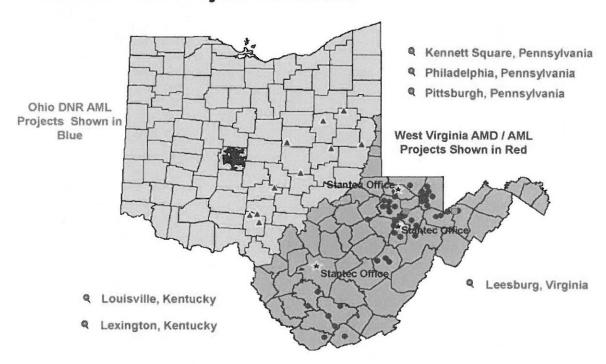
<u>Construction Services:</u> Water & Sewer, Coatings (bridge & tanks), Bridge- in service bridge inspection, Highway- grade & drain, Highway- Bridge, Asbestos inspection

Survey: Boundary, TOPO, Gas Transmission Line Work, GPS

# Similar Experience

The map below shows the locations of some of our AML projects on which Stantec was the prime consultant for West Virginia Department of Environmental protection and Ohio Division of Natural Resources. The pages following this one show our experience more in depth.

# **Stantec AML Project Locations**



The table below shows some of Stantec's regrading, drainage and mine seal qualifications.

PROJECT NAME	MINE SEALS	REGRADING	DRAINAGE
			CONVEYANCES
Tub Run Highwall and Refuse Phase II	4	307,000 CY	11,450 LF
Tub Run Highwall and Refuse Phase I	0	265,000 CY	9,805 LF
Greenbrier Hollow Refuse	3	51,500 CY	1,011 LF
Pageton (Lambert) Portals	24	60,000 CY	829 LF
Birds Creek Number Four	4	34,600 CY	5,860 LF
Church Creek / Manown Highwall	21	220,400 CY	14,882 LF
Howesville Sites	11	63,000 CY	5,676 LF
Sandy Run Highwall and Portals	6	47,200 CY	4,148 LF
Racine (Bradshaw) Portals	8	2,500 CY	1,062 LF
Price Hill Airshaft and Buildings	2	1,300 CY	174 LF
Weaver Portals and Highwall I & II	20	97,200 CY	7,006 LF
Nixon Run AMD	1	1,800 CY	841 LF
Old Bridgeport Hill, Phase II	4	8,800 CY	1,400 LF
Francis Drainage and Refuse	15	163,000 CY	9,000 LF
Thomas (Euclid Avenue) Subsidence	3	153,500 CY	6,500 LF

### Tub Run Highwall and Refuse Phase II

Tucker County, West Virginia

Stantec was contracted by the WVDEP to provide reclamation of 12,500 Linear Feet of Highwall with 307,000 C.Yds. of balanced earthwork; refuse regrading and soiling; revegetation of 87.0 Acres, 27.0 Acres on Forest Service; drainage: hydrologic and hydraulic studies for design of eighteen ditches (11,450 LF), four (4) wet mine seals; and surveying and mapping. Services also included subsurface investigation (12 holes, 1 Piezometer Set); clearing and grubbing of 87.0 Acres and 27.0 acres on forest service; surface and ground water testing and reporting; Debris Removal Plan; subsurface drain; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.



### Tub Run Highwall and Refuse Phase I

Tucker County, West Virginia



Stantec was contracted by the WVDEP to provide reclamation of 10,000 LF of highwall with 265,000 C.Yds of balanced earthwork; refuse regrading and soiling; revegetation of 74.0 Acres; drainage: hydrologic and hydraulic studies for design of nine ditches (9,805 LF); stream bank protection; five pipes (244 LF); 8-Foot by 8-Foot box culvert, and surveying and mapping. Services also included: subsurface investigation (15 holes); clearing and grubbing of 74 Acres; surface and ground water testing and reporting; debris removal plan; subsurface drain; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid

schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

### **Greenbrier Hollow Refuse**

McDowell County, West Virginia

Stantec was selected by the WVDEP to provide reclamation of Cast-Over-The-Hill refuse pile and mine seal reclamation totaling 51,500 C.Yds of balanced earthwork; refuse regrading and soiling; revegetation of 8.0 Acres; drainage: hydrologic and hydraulic studies for design of six ditches (1,011 LF); two manholes; three pipes (open-cutting McDowell County Route 17/10); three wet mine seals; and surveying and mapping. Services also included: utility relocations and coordination, clearing and grubbing of 8 Acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; subsurface drain;



access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

### Pageton (Lambert) Portals

McDowell County, West Virginia

Stantec was selected to provide the WVDEP with reclamation of Cast-Over-The-Hill refuse pile and mine seal reclamation totaling 60,000 C.Yds of balanced earthwork; refuse regrading and soiling; revegetation of 24 Acres; drainage: hydrologic and hydraulic studies for design of four ditches (829 LF); stream bank protection; 1 pipe; and seventeen splash pads; twenty three wet mine seals; one dry seal, and surveying and mapping. Services also included were utility coordination; clearing and grubbing of 24 acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; subsurface drain; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and



calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

# **Birds Creek #4**Preston County, West Virginia



Stantec was selected by the WVDEP to provide reclamation of a 4,300 LF highwall with 34,500 C.Yds of balanced earthwork; refuse regrading and soiling; revegetation of 28 acres; drainage: hydrologic and hydraulic studies for design of ten ditches (5,860 LF) and one pipe; four wet mine seals; four bat gate installations, and surveying and mapping. Services also included subsurface geological investigation (5 piezometers installed); clearing and grubbing of 28 acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; subsurface drain; access road design and improvement; sediment control design; construction plans and specifications;

engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

### Church Creek/Manown Highwall

Preston County, West Virginia

Stantec was contracted by the WVDEP to provide reclamation of a 15,500 LF highwall with 220,400 C.Yds of balanced earthwork; refuse regrading and soiling; reforestation of 8 acres; revegetation of 63 Acres; drainage: hydrologic and hydraulic studies and design of thirty three ditches (14,882 LF) and two pipes; twenty one wet mine seals; two bat gate installations; one dry mine seal, and surveying and mapping. Other services included: subsurface geological investigation (6 piezometers installed); clearing and grubbing of 71 acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; subsurface drains; access road design and improvement; sediment control design; construction plans and specifications; engineers cost



estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and preconstruction meetings; and monthly reports and invoicing.

### Howesville Sites and Sandy Run Highwall and Portals

Preston County, West Virginia

Stantec was selected by the WVDEP to provide reclamation of 5,900 LF highwall with 110,200 C.Yds of balanced earthwork; refuse regrading and soiling; 52 acres of revegetation; drainage: hydrologic and hydraulic studies and design of thirty two ditches (9,824 LF)and five pipes; seventeen wet mine seals; four bat gate installations; and surveying and mapping. Services also included subsurface geological investigation (5 piezometers installed); clearing and grubbing of 52 acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; stream bank protection; subsurface drains; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid



schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

### Weaver Portals and Highwall, Phase I and II

Randolph County, West Virginia



Stantec was selected by the WVDEP to provide reclamation of a 4,200 LF highwall with 97,200 cubic yards of balanced earthwork; refuse regrading and soiling; 35 acres of revegetation; drainage: hydrologic and hydraulic studies and design of twenty five ditches (4,148 LF) and ten pipes; twenty wet mine seals including modified seals; and surveying and mapping. Services also included subsurface geological investigation (6 piezometers installed); clearing and grubbing of 35 acres; ACOE Permit; sediment control plan; surface and ground water testing and reporting; mine dewatering and treatment plan; six AMD passive treatment limestone beds; subsurface drains and manholes; access road design and improvement; debris removal plan; sediment control design;

construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

# Abandoned Underground Mine Inventory and Risk Assessment Statewide Database Population Various Counties, Ohio

Stantec performed mine inventory and risk assessment of state roadways underlain by abandoned underground mines.

The Ohio Department of Transportation (ODOT) Office of Geotechnical Engineering developed the Abandoned Underground Mine Inventory and Risk Assessment (AUMIRA) process to prioritize sites with regard to the potential threat to public safety and need for a more detailed investigation, monitoring or remediation. Stantec was selected to populate the AUMIRA database for Districts 3, 8, 10 and 11, which totaled approximately 675 sites.



Sites were identified by overlaying Ohio Department of Natural Resources (ODNR) abandoned mine mapping on state roadway mapping.

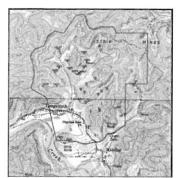
Prior to field work, Stantec reviewed information sources, such as available mapping, historical information, roadway and right-of-way plans, previous subsurface investigations and maintenance records. The information gathered included locations of mapped mine openings, elevation of the mine, overburden composition, coal seam thickness, traffic volumes and hydrogeologic setting.

Stantec's field team consisting of four engineers and geologists, performed a reconnaissance of each site identifying features indicating past underground mining activity, such as surface deformations, sinkholes, seeps, acid mine drainage, drift and slope entries, and vertical mine shafts. Handheld GPS units were used to collect locations of these points. Digital photographs were collected of the mining features.

The AUMIRA database was populated and a score was assigned to each site indicating the potential for subsidence. Stantec prepared cost estimates for remediation for the ten highest ranking sites in each county.

### Wayne National Forest Abandoned and Inactive Mine Lands

Athens, Ohio



The project site is situated in east central Ohio within the boundaries of the Athens District of the Wayne National Forest. Numerous areas within the forest have been disturbed by surface and underground coal mining operations which did not include proper reclamation measures.

The objective of the project was to identify abandoned and inactive coal mine sites, their associated features, collect required field data, prepare a database and merge it with the database of the Ironton Ranger District of the forest.

Efforts were initially focused within the Monday Creek Watershed. Additional inventory followed in the Sunday and Raccoon Creek Watersheds. The Abandoned

and Inactive Mine (AIM) search and discovery focused on areas with known underground mines, and areas with a combination of known underground and strip mines. U.S. Forestry Service prioritized areas for inventory based on ODNR-Division of Geologic Survey underground mine maps, and underground mine locations known to Forest Service personnel. The work encompassed a total area of 31,000 acres.

Stantec provided two-person teams to perform discovery and field inventory work by walking up drains (hollows) and along hillside elevation contours of known coal seams and benches in specified areas. Data was collected in accordance with the "Wayne National Forest AIM Data Dictionary". The data dictionary was installed into a GPS field data recorder, which was also used to store the position of the different AIM features. GPS-obtained location information was differentially corrected by downloading base station data from an internet web site.

Any pond, seep or stream encountered along the selected drains was subjected to water quality monitoring. The monitoring was accomplished by using portable water quality instruments that measured multiple parameters simultaneously including: temperature, pH, conductivity, dissolved oxygen, oxygen reduction potential and turbidity.

### **Upper Coldwater Fork Stream Restoration**

Martin County, Kentucky



Following initial clean-up efforts of a coal slurry release, Stantec was retained to lead the stream and ecosystem rehabilitation of nearly 6,000 LF of Upper Coldwater Fork in Eastern Kentucky.

In October 2000 a coal slurry impoundment breached into underlying mineworks, releasing more than 250 million gallons of slurry into the Coldwater Fork and Wolf Creek valleys. Called one of the worst mining disasters on the environment by the EPA, clean-up efforts were begun immediately for the Coldwater Fork and Wolf Creek(s) and continued for several months. During clean-up efforts, portions of Coldwater Fork were

realigned as up to eight feet of debris and slurry was removed. Following this initial clean-up, the channel was unstable and the riparian and aquatic habitats destroyed.

Stantec was contracted to lead the stream and ecosystem rehabilitation on Upper Coldwater Fork. The scope of work included collection of field data on impacted reaches and reference reaches; preparation of natural channel design stream restoration plans; construction assistance, and post-construction monitoring. The urgency of the project required a streamlined approach to design, permitting and construction. Stantec worked closely with the owner, regulatory agencies, and property owners to meet critical timelines and maximize construction and planting seasons. Construction was completed within five months.

Nearly 6,000 LF of stream was designed, consisting of a C-type stream with step pools, cross vanes, and j-hooks; bioengineering treatments such as live staking were utilized throughout the project. Three years of post-construction monitoring have been completed with results demonstrating excellent recovery from both a geomorphology perspective as well as a biological function perspective.

### Oxford Mine Mitigation Monitoring

Multiple Sites, Ohio

Stantec monitored various mitigation sites resulting from impacts by coal mining activities. Impacts to resources included streams and wetlands which were "waters of the United States" (WOUS). Mitigation measures included stream reclamation and relocation and wetland creation. Mitigation streams and wetlands were monitored to ensure the restoration of pre-mining ecological functions.

Stantec provided services for 16 mine sites ranging from 18 to 775 acres in Belmont, Coshocton, Guernsey, Harrison, Jefferson, Muskingum, Perry, and Tuscarawas counties. Mitigation sites were assessed according to



performance criteria specified in the Coal Mining and Reclamation Permit, Section 404 Permit, and the 401 Water Quality Certification. Streams and wetlands were assessed using standard procedures outlined in Ohio EPA's Qualitative Habitat Evaluation Index (QHEI) and Ohio Rapid Assessment Method for Wetlands (ORAM).

Project highlights included field investigations and reporting. Field investigations included an evaluation of the physical characteristics and function of constructed wetlands and streams. Monitoring was performed for a total of 70 streams and 23 wetlands. Sites are to be monitored for at least five years and are in various stages of monitoring. A report is prepared and submitted to the Ohio EPA and U.S. Army Corps of Engineers for approval at the end of each monitoring year.

### Little Coal River Stream Restoration

Boone and Lincoln Counties, West Virginia



Stantec was contracted to provide restoration design and construction services of approximately 16.5 miles along the Little Coal River in southern West Virginia. The project was funded through the West Virginia Department of Environmental Protection to mitigate for coal mining impacts in the Appalachian Plateau.

Stantec worked with the West Virginia Conservation Agency, Patriot Coal Company, Green Rivers LLC, and North State Environmental through multiple phases of the project. Stantec completed all phases of the design including a 16.5 mile geomorphic assessment and survey.

As part of this restoration work, fish and habitat surveys were conducted to determine appropriate design parameters and construction techniques and establish baseline conditions for fish populations prior to construction. Deep water habitats were sampled from a boat using a Smith-Root GPP 5.0 electrofisher. Wadeable habitats were sampled with a Smith-Root LR24 backpack electrofisher and a 6-foot by 10-foot seine. Surveyors attempted to equalize fishing efforts between gear types and macrohabitats by shocking for approximately 200 seconds. Survey areas were stratified by observable macrohabitat types and by position on the channel margin or in mid-channel. Within the discrete limits of each macrohabitat type, surveyors measured depth and velocity at three physical habitat stations using a Marsh-McBirney FloMate. Surveyors also visually assessed the proportion of substrates present at these stations using a modified Wentworth scale and visually assessed cover type and availability.

The first 1.5 miles of restoration was constructed in the winter of 2011/2012 in which Stantec provided construction support. The remaining 15 mile restoration design will be completed in the summer of 2012 and construction for the 15 miles will be implemented in the fall of 2012.

### Little Coal Fish and Habitat Surveys

Boone & Lincoln Counties, West Virginia

Stantec was contracted by the West Virginia Conservation Agency (WVCA), Guyan District to assess conditions and develop restoration designs for approximately 15 miles of the Little Coal River in Boone and Lincoln Counties, West Virginia. The objectives of this study were to complete fish and habitat surveys to aid in determining appropriate design parameters and construction techniques, and establish baseline conditions for fish populations prior to construction.

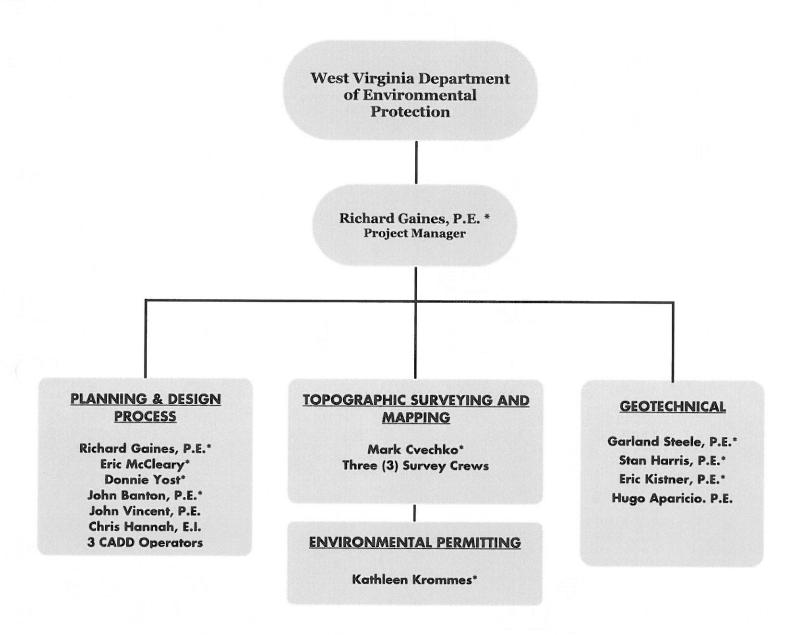
A total of 6 sites and 29 macrohabitats were surveyed for fish in the fall of 2011. Deep water habitats were sampled from a boat using a Smith-Root GPP 5.0 electrofisher and wadeable habitats were sampled with a Smith-Root LR24 backpack electrofisher and a 6-foot x 10-foot seine. Physical habitat was measured and visually assessed at 86 stations within the macrohabitats. Within the discrete limits of each macrohabitat type, surveyors measured depth and velocity at three physical habitat stations using a Marsh-McBirney FloMate. Surveyors also visually assessed the proportion of substrates present at these stations using a modified Wentworth scale and visually assessed cover type and availability.

Runs, pools, eddies, and backwaters were dominated by fine grained substrates (i.e., silt and sand). Sand was observed at 73 of 86 locations, and some form of cover was observed in 55 of 86 physical habitat stations. Over 500 fish comprising 29 species were collected in the sampling effort. Species density and richness was highest in coarse-grained substrates. Fish were most frequently associated with large wood and boulder cover types. Fish densities were high in mid-channel units sampled with backpack electrofisher but species per unit effort was low suggesting the presence of a small number of specialized species. Species richness was highest in the margin habitats and fourteen of the 29 species collected were found exclusively in margin habitats.

These observations informed restoration design and implementation regarding substrate composition, instream cover, availability of off-channel habitats, glide dimensions, riffle slopes, and pool dimensions.

# Project Team

Below is our proposed project team for the completion of the Project. Resumes are included on the following pages.



<sup>\*</sup>Resumes Included

### Richard Gaines, P.E.

Project Manager

Mr. Gaines has 25 years of experience in project management and civil engineering related to oil and gas development, land development, water systems and treatment, and sanitary sewer collection and treatment projects. His design experience includes layout, grading, drainage, erosion control and permitting for road entrances, access roads, well pads, pits and impoundments for multiple well pads and developments. He is currently a Senior Civil Engineer in the Fairmont office West Virginia of Stantec.

### **EDUCATION**

B.S./Civil Engineering/Fairmont State College A.S./Mechanical Engineering/Fairmont State College

### RELEVANT REGISTRATIONS

Registered Professional Engineer/17220-WV/2007 Registered Professional Engineer/035466-VA/2002

### PROJECT EXPERIENCE

PSD#4 Lenox/Cuzzart Water System, Preston County, WV - Public Service District #4, Bruceton Mills, Preston County, WV. Project Manager to design, permit, bid and inspect the construction of a 42-mile water system extension to serve approximately 400 new customers in the Lenox and Cuzzart area of Preston County, West Virginia for the Preston County Public Service District #4. The project includes the design of the water distribution system which includes four water storage tanks, five booster pump stations, and three pressure reducing valves. Funding for the project is provided by the Abandoned Mine Lands division of the West Virginia Department of Environmental Protection (WVDEP/AML) and the West Virginia Infrastructure and Jobs Development Council. The project was initiated by the WVDEP/AML because the areas water sources were significantly impacted by coal mining operations prior to permitting requirements enacted in 1977.

PSD#4 Hudson to State Line Water System, Preston County, WV - Public Service District #4, Bruceton Mills, Preston County, WV. Project Manager to design, permit, bid and inspect the construction of a 81-mile water system extension to serve approximately 400 new customers in the Hudson to the State Line area of Preston County, West Virginia for the Preston County Public Service District #4. The project includes the design of the water distribution system which includes four water storage tanks, two booster pump stations, and one pressure reducing valves. Funding for the project is provided by the Abandoned Mine Lands division of the West Virginia Department of Environmental Protection (WVDEP/AML), Drinking Water Treatment Revolving Fund (DWTRF) and the West Virginia Infrastructure and Jobs Development Council. The project was initiated by the WVDEP/AML because the areas water sources were significantly impacted by coal mining operations prior to permitting requirements enacted in 1977.

Lyonsouth, Commercial Development Property, Nutter Fort, WV. Project Engineer/Manager on a multi-phased commercial property development site for a private land developer. The phases consist of working with the developer to obtain cut and fill information along with permanent storm retention pond sizing and location on a 15 acre parcel of land, permitting for the phases that include permits to the Department of Environmental Protection for an MR-4C Incidental Coal Removal Permit, an update to the WV Construction Storm Water General Permit. Another phase consisted of assisting the developer in obtaining status of approval for limestone being removed from the property to be qualified for use on a public damn project.

**Sub-consultant to Land Surveyor for E&P Client** – **Well Pad, Upshur County, WV.** Project Manager for the development of a well pad in Upshur County, West Virginia. Provided oversight of the preliminary and final design for a well pad with four proposed wells, two drill pits, a 4 million gallon impoundment and 2600 LF of access road. The design included layout, grading, drainage and erosion control per WVDEP standards.

**Confidential E&P Client – County Route 9/7 Improvements, Ritchie County, WV.** Project Manager for the design of 1.25 miles of road upgrade to access multiple well pads. The improvements included increasing roadway travel widths, reshaping of roadway cut/fill slopes, improving roadway geometry, extension/replacement of drainage culverts. All design was completed in accordance with WVDOH and WVDEP standards.

Confidential E&P Client - County Route 22/5 Improvements (Turtle Run), Ritchie County, WV. Project Manager for the design of 1.70 miles of road upgrade to access proposed well pads. The improvements included increasing roadway travel widths, reshaping of roadway cut/fill slopes, improving roadway geometry, extension/replacement of drainage culverts.

# **Eric McCleary**Planning & Design

Eric's work experiences include wetland delineation and mitigation, acid drainage abatement, environmental assessments, environmental impact statements, watershed restoration, and threatened and endangered plant and animal identification associated with various environmental projects.

Eric has been responsible for dozens of mitigation / restoration plans and associated monitoring, which involved mitigation / restoration plan development, DEP meetings, construction oversight, planting, and monitoring for both physical and water quality results post-construction. While some of his stream restoration projects were associated with primarily physical design goals achieved using Rosgen methodology, many other projects were designed to achieve stream restoration from a water quality standpoint (e.g., mine drainage).

### EDUCATION

BS, Biology, Clarion University of Pennsylvania, Clarion, Pennsylvania, 1984 MS, Evolutionary Ecology/Herpetology, Kent State University, Kent, Ohio, 1989 Certification, Operator Class 2 Industrial Wastewater Works, State of Maryland, 2012 Certification, Wild Plant Management Permit, Commonwealth of Pennsylvania, 2011

### PROJECT EXPERIENCE

Treatment System Monitoring\*, Baltimore, Maryland (Senior Ecologist) As senior ecologist Eric was responsible for monthly monitoring (including sampling of the treatment system and analysis of the field water chemistry) of the passive treatment system he designed in 2003 and an annual macroinvertebrate report to determine the impact the passive treatment system has on the receiving stream. He also provided consultation for additional treatment needs at this location for Constellation Energy (now Exelon Power).

PSD#4 Lenox / Cuzzart Water System\*, Preston County, West Virginia (Senior Ecologist) For Public Service District #4, Eric served as the senior ecologist responsible for wetland delineations and stream crossing for the construction of a 42-mile water system extension to serve approximately 400 new customers in the Lenox and Cuzzart area of Preston County, West Virginia for the Preston County Public Service District #4. Included the design of the water distribution system, which included four water storage tanks, five booster pump stations, and three pressure reducing valves. Funding for the project provided by the Abandoned Mine Lands division of the West Virginia Department of Environmental Protection (WVDEP/AML) and the West Virginia Infrastructure and Jobs Development Council. The project was initiated by the WVDEP/AML because the area's water sources were significantly impacted by coal mining operations prior to permitting requirements enacted in 1977.

Well Pad and Utility Line Siting and Permitting\*, Various, Pennsylvania (Senior Ecologist) Eric was the senior ecologist responsible for wetland delineations, stream evaluations and assessments, applicability of acid mine drainage for a water source for the industry's needs (hydrofracing), general permitting, PNDI reviews, and Timber Rattle Snake and Massasauga monitoring.

General Permit Applications\*, Various Counties, Pennsylvania (Senior Ecologist) As senior ecologist, Eric prepared general permit applications for stream crossing and natural gas line development that included environmental assessments at various sites. He also evaluated critical habitat for various animal and plant species including Timber Rattlesnakes.

Eldredge Spill Biological Assessment\*, Venango County, Pennsylvania (Senior Ecologist) As senior ecologist Eric conducted a follow-up on a spill that occurred along Interstate 80. He conducted PNDI review to determine if any threatened, endangered, or sensitive species and/or habitat are present in the project area, along with an NWI, Chapter 93, and native trout stream review. Eric also conducted field investigation to determine area of contaminated soil and sediment. He determined if any wetlands were present and, based on agency review, if the wetlands are Exceptional Value (EV); and prepared a summary report to determine if any additional studies were necessary for compliance with 25 PA Code 250.311.

Environmental Assessment and Archeological Evaluations\*, McKean County, Pennsylvania (Senior Ecologist) As senior ecologist, Eric was responsible for environmental assessment of the Kinzua Valley Trail (10.5 miles). The project included critical habitat assessments for numerous plant & animal species including Timber Rattlesnakes and Wood Turtles.

### **Donnie Yost**

Planning & Design

Mr. Yost has 2 years' experience in AML Design and 8 years of experience in other AML related design work. He has performed quantity calculations; developed CADD drawings, developed Hydrologic and Hydraulic design data; has completed sampling for water, soil, coal, and hazmat; prepared technical reports and engineer's estimates for several AML projects.

EDUCATION

B.S./Civil Engineering Technology

### PROJECT EXPERIENCE

**Norton Highwall #1,** Developed CADD drawings and hydrologic and hydraulic design. The project included reclamation, revegetation; topographic surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for ditches and pipes; Sediment Control Design; and a revegetation plan.

**Tub Run Highwall & Refuse, Phase I,** Developed CADD drawings and hydrologic and hydraulic design. The Project included reclamation design with 265,000 Cubic Yards of Excavation, 8,500 l.ft. Access Road; 46,000 l. ft. Sediment Control; 9,900 l.ft. of Ditches; 4 Pipes; 8 ft. by 8 ft. Box Culvert; and 74 acres of Revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Dewatering and AMD Treatment Plan; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

Tub Run Highwall & Refuse, Phase II, Developed CADD drawings and hydrologic and hydraulic design. Project included the reclamation design with 307,000 Cubic Yards of Excavation, Four (4) Wet Mine Seals; 9,500 l.ft. Access Road; 65,000 l. ft. Sediment Control; 11,400 l.ft. of Ditches; and 114 acres of Revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Dewatering and AMD Treatment Plan; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

Greenbrier Hollow Refuse Pile, Developed CADD drawings and hydrologic and hydraulic design. The project included reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, two (2) wet mine seals; 4,300 l.ft. Sediment Control; 1,015 l.ft. of Ditches; 5 Pipes; and 8 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

Pageton (Lambert) Portals, Developed CADD drawings and hydrologic and hydraulic design. The project included reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, twenty four (24) wet mine seals; 13,700 l.ft. Sediment Control; 1,600 l.ft. of Ditches; 1 Pipe; Streambank Protection; and 24 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

**Town of Newburg Waterline Extension Feasibility Study**, Collected water samples and provided the report for a 8.0 Mile Waterline Extension Feasibility Study – I.D. No. 392, involving 96 Residents. Project included surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; and Initial On-Site Meeting. Engineering cost proposal.

### John Banton, P.E.

Planning & Design

Mr. Banton currently serves as a senior project engineer and is involved in a range of geotechnical civil engineering projects. His primary responsibilities include the supervision of all aspects of geotechnical explorations, overseeing construction quality control inspections, and designing and overseeing drafting of general civil engineering. Mr. Banton's background includes experience as both technician and engineer. He has supervised subsurface investigations for residential, commercial and industrial facilities. He has designed soil retention and underground and above ground stormwater detention systems. Other experience includes performing foundation and soil construction quality assurance, drafting, surveying, drilling and sampling, and report writing. He has worked on design projects involving dams, drainage, retaining walls, water and sewer lines, foundations for buildings, towers, tanks and roads.

### **EDUCATION**

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1995 Structural Geogrid Seminar, Cincinnati, Ohio, 2000 Underground Detention Designs for Stormwater Management, National Corrugated Steel Pipe Association and American Iron and Steel Institute, Cincinnati, Ohio, 1998

### RELEVANT REGISTRATIONS

Professional Engineer #21645, Commonwealth of Kentucky Professional Engineer #65018, State of Ohio

### PROJECT EXPERIENCE

Wilson Landslide, Ironton, Lawrence County, Ohio, Served as project engineer for the geotechnical exploration as well as for the design of the repair of the landslide. The project consisted of a landslide, which threatened a private residence, due in part by groundwater seeping from a series of abandoned mines. A gabion retaining wall was constructed to restore the resident's usable space. Subsurface drains were installed to control groundwater. The project qualified for ODNR AML Emergency Program funding. Mr. Banton ensured a quick turnaround of the design documents in order to execute a timely remediation.

**Diamond Brick Subsidence Emergency Project, Oak Hill, Jackson County, Ohio,** Past underground mining caused a sinkhole to suddenly develop beside a house, in a play area for resident children. Stantec advanced rock core borings on the property to establish coal/void extents. Mr. Banton, as with many other similar projects in the Emergency Program, quickly visited the site, performed a rough topographic survey and produced a suitable plan view drawing for use as a construction layout. A photographic survey of the structure and surrounding land was also performed. A set of bid-ready documents for a grouting program were prepared and submitted within 11 days of the site visit.

Midvale Burning Gob Pile, Tuscarawas County, Ohio, A former coal and clay strip mine was the site of a deposit of coal refuse that was burning underground. Past efforts failed to extinguish the fire. Stantec prepared plans and specifications to stop the fire and reclaim the surrounding mine bench. Mr. Banton designed the excavation and backfill plans as well as drainage and sediment control plans. He supervised surveying, the geotechnical exploration, and produced the plans and specifications for the project.

**K&R D-105 Bond Forfeiture Reclamation Project, Stark County, Ohio**, A lake that formed behind a large spoil pile was flooding adjacent land. The firm's design included an economical spillway through the spoil pile and fill for reclaiming mine benches. Mr. Banton detailed drainage and cut and fill limits for a balanced reclamation design. He also provided a detailed estimate of quantities and an engineer's cost estimate.

**Abandoned Mine Lands Reclamation Projects, OH**, Stantec contracted to design and prepare plans and specifications to stop the effects of flooding, slope failure, erosion and acidic runoff on properties of nearby residents. Mr. Banton assisted in design of slopes, design of roads and drainage and design of artificial wetlands. He supervised surveying, assisted in research and created construction documents for the three-site project.

### Garland Steele, P.E.

Geotechnical

Garland has more than 50 years of experience in civil engineering with a special emphasis on materials, soils, pavements, forensics, quality assurance, geotechnical exploration and design, construction inspection, and contract administration.

He has in-depth experience implementing research findings in the field; working with a state Department of Transportation program for materials sampling and testing, materials and pavement specifications, structural steel inspection and testing, and soil and rock mechanics exploration, testing, and design; working with state Department of Transportation maintenance and construction operations; and overseeing operations related to the management, recovery and repairs required in the wake of emergencies and disasters affecting the West Virginia highway system (including flooding, earth movements, winds, structural failures, ice and snow, and other traffic flow impacts).

### EDUCATION

Concrete Technician (#136), WVDOT, Charleston, West Virginia, 1990
Aggregate Inspector (#5913), WVDOT, Charleston, West Virginia, 1990
Asphalt Technician (#159), WVDOT, Charleston, West Virginia, 1990
Licensed Class B Explosives Permit (#B060119285913), West Virginia, Charleston, West Virginia, 1990
Bachelor of Arts, West Virginia State University, Institute, West Virginia, 1976
Training, FHWA-NHI-130055 Safety Inspection of In-Service Bridges, National Highway Institute, West Virginia, 2012

### RELEVANT REGISTRATIONS

Professional Land Surveyor #1386, State of West Virginia Professional Engineer #3929, State of West Virginia

PROJECT EXPERIENCE

Old Bridgeport Hill Mine Drainage, Phase II Plans Modification, Harrison County, West Virginia, Harrison County – Near Bridgeport, Clarksburg - Design

AML Project, P.O. #12373A

Coalfields Expressway (5-14-04), Wyoming and Raleigh Counties, West Virginia, Design of 2 mile section of four lane highway with at-grade intersections (withdrawn); State Project #X355-121-16.65 00; Federal Project #HP-1808(007)C

Sauls Run Strip and Landslide Project (7-2004), Lewis County, West Virginia; AML Project

Tunnelton (Dillworth) Landslide (8-2004), Preston County, West Virginia; AML Project

Weaver Portals and Mine Drainage; AML Project, P.O. #DEP12578

Fisher-Mill Creek Bank Stabilization (10-04), Jackson County, Design and Construction inspection.

Laurel Lake Sediment Removal Project, Mingo County

Summit Park Waterline Feasibility Study

Hendrickson Subsidence Investigation; AML Project

North Fork Hughes River - Stream Bank Stabilization, Cairo, Ritchie County, West Virginia

Nixon Run; AML Project

# **Stan Harris, P.E.**Geotechnical

Mr. Harris has broad experience in the field of geotechnical engineering. His past work includes performance of geotechnical explorations for buildings, bridges, dams, landfills, highways, water and waste water treatment plants, and manufacturing facilities. Duties on these projects include development of boring plans, supervision of drilling operations, direction of laboratory testing programs, and performance of engineering analysis and design. He is also responsible for preparation of final geotechnical reports. Mr. Harris reviews and performs engineering analysis for settlement, bearing capacity, and slope stability, and he is experienced in the analysis and design of foundation systems and retaining walls. Mr. Harris is responsible for the supervision of Project Engineers along with numerous Drill Crews, and Field and Laboratory Technicians. He is also responsible for directing efforts of Field Technicians performing quality control testing on major earthwork projects.

### **EDUCATION**

BS in Civil Engineering, University of Kentucky, Lexington, Kentucky, 1980 MS in Civil Engineering, University of Kentucky, Lexington, Kentucky, 1982 Foundations and Earth Retaining Structures, University of Akron, Akron, Ohio, 2006 ODOT Office of Geotechnical Engineering Workshop, Columbus, Ohio, 2008 Ohio River Valley Soils Seminars, Various Topics, Cincinnati, Ohio, 2007

### RELEVANT REGISTRATIONS

Professional Engineer #53083, State of Ohio

### PROJECT EXPERIENCE

Stock Township Road 302, Noble and Muskingum Counties, Ohio (Project Manager), Project Manager for investigation and design of repairs to Stock Township Road 302. Project included hydraulic analysis leading to raising of road to mitigate impacts of flooding caused by strip mining. The project also included remediation of two abandoned tipple sites, one with acid mine drainage. A wetlands was designed to treat AMD.

Ohio AML Emergency Program, Ohio (Project Manager), Mr. Harris serves as Stantec's Project Manager for the AML Emergency program since 1995. He performs site inspections and investigations for mining related problems such as subsidence and landslides. Mr. Harris oversees the preparation of construction documents including drawings, specifications and cost estimates. He has served as Project Manager for more than 60 emergency projects.

River Road Bank Stabilization, Fairfield, Ohio, Erosion from the Great Miami River washed out a 125-foot long section of River Road, forcing its closure. Stantec performed a geotechnical exploration and prepared construction plans for the repairs. The design approach incorporated a rock toe and soil embankment reinforced with geogrids. Heavy duty turf reinforcement mat was also used to protect the face of the new slope until vegetation could be established. Live stakings were also used to provide additional protection against erosion. The project was selected by the American Public Works Association as one of its outstanding projects of 2004.

Center Hill Landfill Bank Stabilization, Cincinnati, Ohio, Supervised geotechnical exploration for stabilization of approximately 300 feet of stream bank along the Mill Creek, next to a closed landfill. Stantec performed exploratory borings and slope stability analyses for various remediation concepts. Mr. Harris also supervised engineering technicians who performed quality control testing during construction.

**Upper Mill Creek WWTP, West Chester, Ohio**, Project Manager for three phases of geotechnical exploration for expansions of the Upper Mill Creek waste water treatment plant. Developed scope of work, assigned field crews and prepared engineering reports for numerous new structures. Stantec also provided similar services for the expansion of Butler County's LeSourdsville treatment plant.

**Symmes Road Extension, Butler County, Ohio**, Served as Project Manager for the geotechnical exploration for the two-mile extension of Symmes Road. Project included exploration for new bridge over CSX railroad.

# **Eric Kistner, P.E.**Geotechnical

Mr. Kistner currently serves as Project Manager with Stantec and is involved in a wide range of geotechnical engineering projects. His project experience includes management and performance of geotechnical exploration for municipal infrastructure, roadways and bridges, landslides, subsidences, dams and levees, and other public works projects. He also has extensive construction materials testing experience on projects such as new school buildings, parking structures, roadway improvements, and elevation water storage facilities. Mr. Kistner has been involved with numerous abandoned mine-related projects including identifying and locating abandoned mines, exploration of underground abandoned mines, and design of abandoned mine remediation.

### **EDUCATION**

BS, Civil Engineering, University of Cincinnati, Cincinnati, Ohio, 1996
Non-Destructive Testing of Drilled Shafts, Deep Foundations Institute (DFI) Specialty Seminar, Cincinnati, Ohio, 2004
Helical Foundations and Tiebacks, DFI Specialty Seminar, Cincinnati, Ohio, 2003
Design and Construction of Earth Retention Structures, DFI Specialty Seminar, Cincinnati, Ohio, 2000
Mechanically Stabilized Earth Walls, The University of Akron Continuing Education Seminar, Akron, Ohio, 1999
Various Topics, Ohio River Valley Soil Seminars, Cincinnati, Ohio, 2011

### RELEVANT REGISTRATIONS

Professional Engineer #18654, State of West Virginia Professional Engineer #24653, Commonwealth of Kentucky Professional Engineer #65507, State of Ohio

### PROJECT EXPERIENCE

**ODOT Abandoned Underground Mine Inventory and Risk Assessment, Ohio**, Mr. Kistner served as Project Manager for this project that consisted of populating a risk assessment database for areas where state highway overlaid mapped abandoned mines. Mr. Kistner coordinated with the ODOT and was responsible for training and supervising the field teams. He was responsible for performing quality control review of the database inputs, RCDA remediation cost estimates, and the final report that included inventory statistics and GIS maps.

Leon Subsidence, Columbiana County, Ohio, Investigated a settlement feature of a house addition being constructed near Franklin Square, Ohio through the DMRM Emergency Program. The contractor believed that the sudden settlement may have been mining related. Mr. Kistner supervised a drilling crew while advancing borings near the problem area. It was determined that the settlement was not mining related. He was responsible for preparing a report that explained that the settlement was probably caused by a loss of shear strength in soil underlying the basement excavation followed by a rise in the groundwater level during a precipitation event.

Rodgers Hallow Reclamation Project, Perry County, Ohio, Mr. Kistner served as geotechnical engineer on this ODNR Division of Mineral Resources Management (DMRM) project that consisted of remediation design for a stream flowing into an abandoned mine and reappearing as acid mine drainage in another stream. He was responsible for coordinating the drilling, sampling and laboratory testing program. Preliminary design recommendations included sealing the mine, stream relocation and stream restoration. Mr. Kistner developed design details and construction cost estimates for the planned mine sealing operation.

Abandoned Mine Inventory and Risk Assessment (AUMIRA) Statewide Database Population, Ohio, Mr. Kistner served as Project Manager for this ODOT project that consisted of populating a risk assessment database for areas where state highways overlaid mapped abandoned mines. The project included a published information review, field reconnaissance using handheld GPS equipment, organizing data in a GIS and database population that scored sites on their potential for future collapse. The project also included remediation cost estimating for the higher ranking sites.

### Mark Cvechko

Topographic Surveying and Mapping

Mr. Cvechko has 30 years of management experience in the Heavy/Highway/Building/Wind Power industry. Mr. Cvechko has worked as senior estimator, project manager and construction manager on projects ranging from one to 30 million dollars. Mr. Cvechko has been in charge of and implemented numerous safety programs and performed safety field inspections. Mr. Cvechko has also performs plan review on design projects for constructability. He has field experience as a superintendent, which attributes a key eliminate in the design process. Mr. Cvechko manages construction projects which include surveying, geotechnical investigation, construction observation, and quality control testing and is responsible for oversight of the Concrete and Aggregate Materials Laboratory.

EDUCATION

AS, Land Surveying, Glenville State College, Glenville, WV, 1977

PROJECT EXPERIENCE

Various WVDEP AML Projects, Assisted with survey and mapping services on various AML projects for the WVDEP.

**Upshur County Board of Education**, Construction Inspector responsible for providing quality control testing during construction of a new school. Provide monitoring and inspection of auger cast in place piles. Coordinate with contractor and owner.

**Nedpower LLC, Mount Storm, WV**; Project Manager responsible for staffing construction inspection. Provide best construction management practices and value engineering for civil construction of 30 miles of roadway and turbine pads. Project included field inspection and erosion sediment control inspections. Field changes were evaluated and provide to the owner as value engineering to reduce cost to owners and to keep the project on budget and schedule. Attend progress meeting, prepare invoices and communicate with the owner.

Mt. Storm Wind Farm; Project Manager responsible for directing workforce to provide quality control testing for all roadways, turbine pads, concrete foundations, anchor bolt testing and grout testing. Providing an onsite laboratory to conduct concrete breaks. Coordinate schedule to provide personnel for 7 day a week/ 24hour a day coverage. Review reports and provide client with all required submittals.

Laurel Mountain Wind Power Project; Project Manager responsible for staffing construction inspection. Provide best construction management practices and value engineering for civil construction of 12 miles of roadway.

**Snowshoe Site and Utilities**; Construction Manager responsible for installation of underground power and fiber optic cables. Duties included directing work force, safety, ordering and scheduling delivery of supplies, preparing cost estimates, prepare change order requests, scheduling subcontractor. Communicating with owner the progress of the project.

**Calhoun County High School/School**; Project manager responsible for site work and utilities for construction of a new high school. Duties included preparing submittals, project scheduling, ordering supplies, attend progress meetings and maintain cost controls, safety inspections, prepare pay estimates and change orders.

**Mussleman High School**; Project manager responsible for site work and utilities for construction of a new high school. Duties included preparing submittals, project scheduling, ordering supplies, attend progress meetings and maintain cost controls, safety inspections, prepare pay estimates and change orders.

Oil Creek Road; Construction Manager Duties included directing work force, safety, ordering and scheduling delivery of supplies, preparing cost estimates, preparing change order requests, scheduling subcontractors. Communicating and coordinating construction activities with the railroad.

**Route 50 By-Pass**; Field superintendent responsible for all aspects of roadway construction, including safety, production, scheduling supply deliveries, coordinating subcontractors, maintaining cost control and schedule, submitting change orders and pay estimates.

### Kathleen Krommes

**Environmental Permitting** 

Ms. Krommes has more than 24 years' experience in the environmental engineering and consulting field, primarily in NEPA studies for transportation projects. Through her involvement in the preparation of Environmental Impact Statements (EIS), Environmental Assessments (EA), Categorical Exclusion Evaluations (CEE), and other environmental documents, she has acquired extensive knowledge of PENNDOT's Transportation Project Development Process. She has also managed the waste management portions of transportation projects for PENNDOT and the Pennsylvania Turnpike Commission. Miss Krommes has played a key role in agency coordination, public outreach programs, and technical review of NEPA documents.

EDUCATION

BS/Chemical Engineering/Grove City College

RELEVANT REGISTRATIONS Engineer-in-Training/PA/1992

PROJECT EXPERIENCE

GSA Region 3 Blanket Purchase Agreement Contract, General Services Administration, Region 3, Virginia. Permitting Specialist for the updating of an existing Spill Prevention, Control, and Countermeasure Plan and West Virginia Department of Environmental Protection Underground Injection Permit. Work included field investigation of storm sewers and oil water separators to determine illicit discharge connections and surveying of existing features to development base mapping. The SPCC Plan evaluated various fuel storage areas, both above- and underground storage tanks, tank filling operations, training and inspection requirements, and spill prevention and response issues. The original West Virginia NPDES Water Pollution Control Permit for the IRS-ECC facility was issued as a non-significant industrial user of the Public Sanitary Sewer District. The original permit allowed the ECC to discharge up to 2,000 gallons per day. Our calculations indicated the facility's discharge was greater than 10,000 gallons per day. Air permit applications were completed and submitted to the State of West Virginia's Department of Environmental Quality. The construction and operating air permits for the facility were secured.

E01528 Somerset Borough Bridge Replacement, Pennsylvania Department of Transportation - District 9-0. Borough of Somerset, Somerset County, PA. Project Manager for providing environmental studies and documentation, including NEPA, wetlands identification and delineation, waterway permitting, and Phase I ESA.

Department of Homeland Security Headquarters at St. Elizabeths Environmental and Engineering Studies, Washington, DC. NEPA Specialist for redevelopment of the St. Elizabeths West Campus. This high-profile, controversial project entails developing a Master Plan for construction of the USCG Headquarters and other components of the Department of Homeland Security on the former mental institution property. G&O is responsible for the Environmental Impact Statement; Section 4(f) Evaluation; wetlands and wildlife assessments; utility planning; site surveying; hazardous materials/hazardous waste assessments; and archeological investigations.

**E01524** Garmantown Bridges, Pennsylvania Department of Transportation, District 9-0. Project Manager. As a subconsultant to Keller Engineers, Inc. responsible for the environmental studies and documentation including NEPA, wetland identification and delineation, threatened and endangered species coordination, Phase I ESA, and historic resource studies. Also, provided supplemental engineering services for the preliminary maintenance and protection of traffic plan.

Lackawanna Valley Industrial Highway Project, Pennsylvania Department of Transportation, District 4-0, Lackawanna County, PA. Coordinated waste management activities for both preliminary design and final design of this fast-tracked project. Her involvement encompassed all aspects of the project, beginning with preliminary area reconnaissance and culminating in development of PS&E's for corrective action at specific waste sites. Critical to the successful development of corrective action plans, was her contribution to negotiations with PADEP. Also assisted in writing and editing the Environmental Impact Statement for the project.

# References

Preston County PSD#4	WVDEP	WV Conservation Agency	Ohio Department of National Resources
Mr. Al Bailey	Mr. Gregg Smith, PE	Mr. Gene Saurborn, PE	Ms. Nancy Seger, PE
PO Box 370 Bruceton Mills, WV 26525	101 Cambridge Place Bridgeport, WV 26330	4720 Brenda Lane, Building 5 Charleston, WV 25305	2045 Morse Rd, Building 5 Columbus, OH 43229
(304) 379-3130	(304) 842-1900	(304) 367-2770	(614) 265-6633

# Required Forms

The forms on the following pages are submitted in accordance with the requirements of the Expression of Interest for the Multiple Permits Design project.

### **CERTIFICATION AND SIGNATURE PAGE**

By signing below, I certify that I have reviewed this Solicitation in its entirety, understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Stantec Consulting	g Services, Inc.	
(Company)		
ph 1 /2	_	
(Authorized Signature)		
Richard Gaines, P. (Representative Name,	E/ Senior Associate Title)	
304-367-9401	304-367-9403	
(Phone Number)	(Fax Number)	
June 11, 2014		
(Date)		

RFQ No. DEP16488	RFQ No.	DEP16488
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### STATE OF WEST VIRGINIA Purchasing Division

# **PURCHASING AFFIDAVIT**

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

### **DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

# Witness the following signature: Vendor's Name: Stantec Consulting Services, Inc. Authorized Signature: Date: June 11, 2014 State of West Virginia County of Marion to-wit: Taken, subscribed, and sworn to before me this 11 day of June 2014. My Commission expires NOTARY PUBLIC Purchasing Affidavit (Revised 07/01/2012)

NOTARY PUBLIC OFFICIAL SEAL STATE OF WEST VIRGINIA JORDAN L. STRAIGHT PO BOX 1881 FAIRMONT, WV 26555 MY COMMISSION EXPIRES NOV. 8, 2020

WEST	WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION				
OSR CONSULTANT QUALIFICATION QUESTIONNAIRE Attachment "B"					
PROJECT NAME: DEP 16488	DATE (DAY, MONTH, YEA	AR) 11 June 2014	FEIN NUMBER		
Multiple Permits Design			11-2167170		
1.FIRM NAME	2.HOME OFFICE BUSINES	S ADDRESS	3.FORMER FIRM NAME		
Stantec Consulting Services Inc.	10160-112 Street, Edmonton, Alberta, Canada, T5l	₹216			
4.HOME OFFICE TELEPHONE	5.ESTABLISHED (YEAR)	6.TYPE OWNERSHIP	6A.WV REGISTERED DB	E	
	100 and 100 an	*	(Disadvantaged Business En	nterprise)	
304-367-9401	1954	INDIVIDUAL CORPORATION			
		DADTNEDGIJD JODET VENETIDE	YES	NO	
PARTNERSHIP JOINT-VENTURE  7. PRIMARY OSR DESIGN OFFICE: ADDRESS/TELEPHONE /PERSON IN CHARGE/ NO. OSR DESIGN PERSONNEL EACH OFFICE					
Fairmont, WV (32) 111 Elkins Street Fairmont, WV 26554-4021 (304) 367-9401 Gary Fazalare, PE					
8. PRINCIPAL OFFICERS OR MEMBER OF FIRM  8A. NAME, TITLE, & TELEPHONE – OTHER PRINCIPALS					
Robert Gomes – President & CEO Rich Allen – Senior Vice President & COO Dan Lefaivre – Senior Vice President & CFO  Aram H. Keith – Chairman Stantec Inc. David L. Emerson – Corporate Director Douglas K. Ammerman – Corporate Director Anthony P. Franceschini Corporate Director Susan E. Hartman – President Hartman Group. Ivor M. Ruste – Executive Vice President					

9. PERSONNEL BY DISCIPLINE					
2140 ADMINISTRATIVE	5 ECOL	OGISTS	364 LANDSCAPE ARCH	ITTECTS	346 STRUCTURAL ENGINEERS
618 ARCHITECHS	<u>14</u> ECO	NOMISTS	163 MECHANICAL ENG	INEERS	SURVEYORS
226 BIOLOGISTS	406 ELEC	CTRICAL ENGINEER	RS 463 MINING ENGINE	ERS	TRAFFIC ENGINEERS
491 CADD OPERATORS	469 ENV	IRONMENTALISTS	PHOTOGRAMMET	RISTS	7,346 OTHER
31 CHEMICAL ENGINEERS	ESTI	MATORS	97 PLANNERS: URBA	N REGION	NAL
612 CIVIL ENGINEERS	91 <b>GEO</b> I	LOGISTS	SANITARY ENGINE	EERS	
29 CONSTRUCTION INSPECTORS	HIST	ORIANS	SOILS ENGINEERS		
DESIGNERS	<u>55</u> HYD	ROLOGISTS	SPECIFICATION		13966 TOTAL PERSONNEL
DRAFTSMEN			WRITERS		
TOTAL NUMBER OF WV REC					
*RPEs other than Civil and Mining must	provide sup	porting documentation t	that qualifies them to supervise	e and perform	m this type of work.
10. HAS THIS JOINT-VENTURE WOR	KED TOG	ETHER BEFORE?	YES NO N/A	A	
11. OUTSIDE KEY CONSULTANTS/S	UBCONSU	LTANTS ANTICIPATI	ED TO BE USED. Attach OSF	R "Consultai	nt Qualification Questionnaire "
NAME AND ADDRESS:	exemples.	SPECIALTY:		ntot.	WORKED WITH BEFORE
Novel Geo-Environmental, PLLC		Subsurface drilling inv	estigation-geotechnical		X YES
806 B Street			k, coal physical property		
St. Albans, West Virginia 25177		testing			NO
		CDECLA LONG			WORKED WITH DEPORE
NAME AND ADDRESS:		SPECIALTY:			WORKED WITH BEFORE
Sturm Environmental Services		Chemical analysis of so	oil, rock, and coal		<u>X</u> YES
P.O. Box 650					
Bridgeport, WV 26330					NO
NAME AND ADDRESS:		SPECIALTY:			WORKED WITH BEFORE
Keddal Aerial Mapping		Aerial Photography			<u>X</u> YES
1121 Boyce Rd, Suite 3100		Developing mapping fr	rom aerial photography		NG
Pittsburgh, PA 15241					NO

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### 12. A. Is your firm experienced in Acid Mine Drainage water treatment and remediation?

YES Description and number of projects: 10+ WVDEP AML Projects, Six (6) Ohio AML Projects; One (1) Ohio Watershed; Recent projects include: *Glady Fork Mining, Inc. (Permit D-35-82) Bond Forfeiture:* Active AMD Treatment Facility – Involved the design of a \$3,000,000.00 AMD plant design that incorporated a single treatment train capable of handling 1,000 gallons per minute of alkaline mine drainage with 15 ppm of total iron and included necessary piping and seating for a second treatment train if future needs arise. The project also involved relining existing boreholes to eliminate mine discharge interruptions, design and construction of 2,500 linear feet of gravity fed plant intake line from the boreholes to the plant site, and an active chemical treatment plant. The treatment plant included an aeration basin (concrete), flocculator (concrete), chemical feed building, settling basin (concrete), sludge thickener (concrete), and geo-tube sludge disposal system with overflow catchment and re-treatment capabilities. Treated water limits are 0.50 ppm iron average, 0.75 ppm iron maximum.

Weaver Portals and Highwall, Phase I & II: Twenty (20) collapsed portals contribute approximately 95 gpm of pH 3.2, 200 mg/l acidity, 10 mg/l iron, 20 mg/l aluminum, and 2 mg/l manganese to Beaver Creek. Designed passive acid mine drainage treatment systems consisting of Open Limestone Channels and six (6) Limestone Beds with engineered "Aluminator" piping systems. The project also included 97,000 Yards Earthwork, 20 Wet Mine Seals, 25 Ditches, 10 Pipes, Sediment Control Plan, and 35 acre Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

Designed Mine Dewatering and AMD Discharge Treatment Plans for the following Projects: Norton Highwall #1; Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number Four, Church Creek / Manown Highwall, Racine, Howesville Sites, Sandy Run Highwall and Portals, Price Hill Airshaft / Buildings (Price Hill Complex), Nixon Run AMD, Old Bridgeport Hill, and Arlington (Cox) Drainage

NO

### B. Is your firm experienced in soil analysis and coal refuse analyses?

YES Description and number of projects: Stantec has successfully completed over 200 soil analysis projects, ranging in size and complexity. In addition, Stantec has completed 30+ AML and AML related Soil Analysis projects.

Numerous Projects Involving Physical Properties of Soil Including Soil Stability Investigations, Design of Soil Fill Slopes, as well as Chemical Properties of Soils including Revegetation Plans: Sauls Run (Carpenter) Landslide; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Nutters Tipple D-716; Danehart Acid Mine Drainage; Lake Milton Investigation. WVCA – Fisher-Mill Creek Bank Stabilization; Harmons Creek Bank Stabilization; Parchment Valley Bank Stabilization; North Fork Hughes River Bank Stabilization. Landfills – Franklin County Sanitary Landfill Capping and Closure Plan; Bobmeyer Landfill Capping and Closure Plan; Fayette County Sanitary Landfill #3 Capping and Closure Plan; Hardin County Sanitary Landfill Capping and Closure Plan; Allied Sanitary Landfill Capping and Closure Plan; Triangle Landfill Capping and Closure Plan; Coshocton Landfill Capping and Closure Plan; B & E Landfill Capping and Closure Plan; Westerville Landfill Capping and Closure Plan. Road Design – U.S. Route 35 Couch to Coast Guard Station; Lawrence County Route 7; Corridor H, Section

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6 Davis to Bismark; Williams Road Widening; Journal Street Extension; Frantz Road; Maxtown Road; Alum Creek Drive. **Quality Control / Quality Assurance Projects** – Glady Fork Permit D-35-82 Bond Forfeiture; ODNR Racine Docks; Fisher Mill Creek bank Stabilization; Hazelton Federal Prison; Clifford Hollow Bridge; Corridor H Job 123; Corridor H Job 125; Corridor H at Baker; Mon-Fayette Bridge; Glenville Federal Prison.

### NO

C. Is your firm experienced in hydrology and hydraulics for handling mine water discharges on mining sites?

**YES** Description and number of projects: Corporate Experience: 80+ projects, including 50+ AML and AML Related Projects; Stantec has successfully completed 100+ hydrology and hydraulics projects, including studies associated with mine water discharges, sediment and other ponds, bridges, box culverts, pipes, and ditches.

### NO

D. Does your firm produce its own aerial photography for development of contour mapping and have your own surveying crew?

YES Description and number of projects: 90+ projects, including 75+ AML and AML Related Projects; Stantec subcontracts development of aerial photography to Aerocon Photogrammetric Services and has successfully set aerial photographic control points on numerous engineering projects by GPS and Conventional Surveying techniques. Stantec has also developed topographic and planimetric maps from GPS and Conventional Surveying techniques and supplemented topographic and planimetric features on mapping developed by aerial mapping firms. Stantec has three survey crews that can be assigned to this project.

### NO

E. Is your firm experienced in design of highwall elimination, grading and material handling plans for land reclamation?

YES Description and Number of Projects: Stantec has successfully completed 40+ AML Reclamation projects that included highwall elimination, grading and material handling plans. Some of our most recent projects include: Norton Highwall #1, Tub Run Highwall and Refuse Phase I and II, Town of Newburg waterline extension, Greenbrier Hollow Refuse, Sauls Run, Pageton (Lambert) Portals, Birds Creek Number 4, Church Creek/Manown Highwall, Racine (Bradshaw) Portals, Hampton Number Four Maintenance, Howesville Sites, Sandy Run Highwall and Portals, Laurel Valley (Daniels) Landslide Emergency AML project, Price Hill Airshaft/Buildings (Price Hill Complex), Weaver Portals and Highwall, Phases I and II, Old Bridgeport Hill Mine Drainage, Phase II, Nixon Run AMD, Arlington (Cox) Drainage, Murray City AMD and Art Project, Nutters Tipple D-716, Flint Run East Acid Mine Drainage Reclamation, Tunnelton (Dillsworth) Landslide, and Sauls Run Strip and Landslide. West Virginia Conservation Agency projects include: Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Krout Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Creek Bank

Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project, Coalwood Floodplain Improvement Project, Rachel Floodplain Improvement Project, Barkers Creek Stream Bank Protection Project, Reedsville Equipment Storage Building, Joskov's Mill Livestock Areas, Edgewood Stream Bank Stabilization, Project, Proje
Storage Building, Jackon's Mill Livestock Arena, Edgewood Stream Bank Stabilization Project, Pringle Road Landslide Remediation, Back Creek Natural Stream Restoration Project, Bunnell Run Stream Bank Stabilization Project, Deckers Creek Stream Bank Stabilization Project.
NO

13. PERSONAL HISTORY STATEMENT OF PR	INCIPALS AND ASSOCIATES RESPONSIB	LE FOR OSR PROJECT DESIGN (Furnish complete date			
but keep to essentials)		•			
NAME & TITLE (Last, First, MI)	First, MI) YEARS OF EXPERIENCE				
Gaines, Richard, L., P.E.	YEARS OF OSR DESIGN EXPERIENCE	YEARS OF OSR RELATED DESIGN EXPERIENCE			
, Set 100 H	4	26			
Brief explanation of responsibilities: Project Manage	er- Will oversee all tasks under this contract.	<u> </u>			
WVAML Experience: Lenox/Cuzzart Waterline Extension Project; Hudson to Stateline Waterline Extension Project  EOI Experience: Mr. Gaines has 25 years of experience in project management and civil engineering related to oil and gas development, land development, water systems and treatment, and sanitary sewer collection and treatment projects. His design experience includes layout, grading, drainage, erosion control and permitting for road entrances, access roads, well pads, pits and impoundments for multiple well pads and developments.					
EDUCATION (Degree, year, specialization)					
B.S./Civil Engineering/Fairmont State College					
A.S./Mechanical Engineering/Fairmont State College					
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, year, state)					
American Society of Civil Engineers		ional Engineer/17220-WV/2007			
American Council of Engineering Companies  Registered Professional Engineer/035466–VA/2002					

13. PERSONAL HISTORY STATEMENT OF PR	13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR OSR PROJECT DESIGN (Furnish complete date					
but keep to essentials)						
NAME & TITLE (Last, First, MI)	YEARS OF EXPERIENCE					
	YEARS OF OSR DESIG	N EXPERIENCE	YEARS OF OSR RELATED DESIGN EXPERIENCE			
McCleary, Eric	1		30			
Brief explanation of responsibilities: Planning and D	Design Support- Eric has be	en responsible for do	ozens of mitigation / restoration plans and associated			
monitoring, which involved mitigation / restoration	plan development, DEP me	etings, construction	oversight, planting, and monitoring for both physical and			
water quality results post-construction. Eric's work	experiences include wetlan	d delineation and mi	tigation, acid drainage abatement, environmental			
	rshed restoration, and threa	itened and endangere	ed plant and animal identification associated with various			
environmental projects.						
EDUCATION (Degree, year, specialization)						
BS, Biology, Clarion University of Pennsylvania, Clarion, Pennsylvania, 1984						
MS, Evolutionary Ecology/Herpetology, Kent State University, Kent, Ohio, 1989						
Certification, Operator Class 2 Industrial Wastewater Works, State of Maryland, 2012						
Certification, Wild Plant Management Permit, Commonwealth of Pennsylvania, 2011						
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS REGISTRATION (Type, year, state)						
member, National Association of Environmental Pro-	ofessionals					
member, Society of Wetland Scientists						
member, Society for Ecological Restoration						

13. PERSONAL HISTORY STATEMENT OF PR	INCIPALS AND ASSOCI	ATES RESPONSIBI	LE FOR OSR PROJECT DESIGN (Furnish complete date		
but keep to essentials)					
NAME & TITLE (Last, First, MI)	YEARS OF EXPERIENCE				
Harris, Stan, P.E.	YEARS OF OSR DESIG	N EXPERIENCE	YEARS OF OSR RELATED DESIGN EXPERIENCE		
	11		31		
Brief Explanation of Responsibilities: Staff Eng	gineer and Signatory - H	Hydrology, Site Des	sign. Designer - AutoCAD, SurvCAD, and Haestads		
Operator. Specification Writer, Calculation Brie					
			•		
AML Experience: Ohio AML Emergency Progr	ram; Little Storms Creek	Road Reclamation	n Project, River Road Bank Stabilization; Center Hill		
Landfill Bank Stabilization	trainformation 🖈 1000 to total authorise and superior desired trainformatical contrates and the superior desired training to the superior desired training tra		5		
Related AML Design: Upper Creek WWTP; Sy	mmes Road Extension				
	Testate a raine Besigni opper of oak in in 11, symmes reduce Extension				
EDUCATION (Degree, year, specialization) B.S., 1994, Civil Engineering					
MEMBERSHIP IN PROFESSIONAL ORGANIZA		REGISTRATION (			
BS in Civil Engineering, University of Kentucky, Lexington, Kentucky, 1980   Professional Engineer #53083, State of Ohio					
MS in Civil Engineering, University of Kentucky, Lexington, Kentucky, 1982					
Foundations and Earth Retaining Structures, University of Akron, Akron,					
Ohio, 2006					
ODOT Office of Geotechnical Engineering Worksho	op, Columbus, Ohio,				
2008	7' ' ' OI' <b>2</b> 007				
Ohio River Valley Soils Seminars, Various Topics, C	Cincinnati, Ohio, 2007				

13. PERSONAL HISTORY STATEMENT OF PR	13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR OSR PROJECT DESIGN (Furnish complete date				
but keep to essentials)					
NAME & TITLE (Last, First, MI)	YEARS OF EXPERIENCE				
Banton, John, P.E.	YEARS OF OSR DESIGN EXPERIENCE	YEARS OF OSR RELATED DESIGN EXPERIENCE			
	16	32			
Brief Explanation of Responsibilities: Staff Engine	er – Develop and perform quantity calculation	ns; Develop Hydrologic and Hydraulic design data; Water,			
soil, coal, and hazmat sampling; Technical report an	d calculation brief preparation; Develop data for	or engineers estimate.			
500	4	4-11			
Ohio AML Experience: Stantec contracted to design	gn and prepare plans and specifications to sto	p the effects of flooding, slope failure, erosion and acidic			
runoff on properties of nearby residents. Mr. Banton	assisted in design of slopes, design of roads as	nd drainage and design of artificial wetlands. He supervised			
surveying, assisted in research and created construct	surveying, assisted in research and created construction documents for the three-site project.				
DI. IMED					
Related AML Design: Various Reclamation projects, Landslide projects, Subsidence Projects					
EDUCATION (Degree, year, specialization)					
BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1995					
Structural Geogrid Seminar, Cincinnati, Ohio, 2000					
Underground Detention Designs for Stormwater Management, National Corrugated Steel Piple Association and American Iron and Steel Institute, Cincinnati, Ohio, 1998					
MEMBERSHIP IN PROFESSIONAL ORGANIZA					
		neer #21645, Commonwealth of Kentucky			
Professional Engineer #65018, State of Ohio					

13. PERSONAL HISTORY STATEMENT OF PR	INCIPALS AND ASSOCIATES RESPONSIE	LE FOR OSR PROJECT DESIGN (Furnish complete date
but keep to essentials)		•
NAME & TITLE (Last, First, MI)	YEAR	S OF EXPERIENCE
Kistner, Eric, P.E.	YEARS OF OSR DESIGN EXPERIENCE	YEARS OF OSR RELATED DESIGN EXPERIENCE
	15	18
Brief Explanation of Responsibilities: Staff Engine	er – Develop and perform quantity calculation	ns; Develop Hydrologic and Hydraulic design data; Water,
soil, coal, and hazmat sampling; Technical report and	d calculation brief preparation; Develop data for	or engineers estimate.
Ohio AML Experience: ODOT Abandoned Undergr	ound Mine inventory and Risk Assessments; L	eon Subsidence; Rodgers Hallow Reclamation Project
EDUCATION (Degree, year, specialization)		
BS, Civil Engineering, University of Cincinnati, Cin		
Non-Destructive Testing of Drilled Shafts, Deep For		ncinnati, Ohio, 2004
Helical Foundations and Tiebacks, DFI Specialty Se		
Design and Construction of Earth Retention Structur	es, DFI Specialty Seminar, Cincinnati, Ohio, 2	000
Mechanically Stabilized Earth Walls, The University	of Akron Continuing Education Seminar, Akr	ron, Ohio, 1999
Various Topics, Ohio River Valley Soil Seminars, C	incinnati, Ohio, 2011	
MEMBERSHIP IN PROFESSIONAL ORGANIZA	TIONS REGISTRATION	(Type, year, state)
	Professional Engir	neer #18654, State of West Virginia
	Professional Engir	neer #24653, Commonwealth of Kentucky
	Professional Engin	neer #65507, State of Ohio

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	INCIPALS AND ASSOCIATES RESPONSI	BLE FOR OSR PROJECT DESIGN (Furnish complete date
but keep to essentials)	NATE AT	
NAME & TITLE (Last, First, MI)		RS OF EXPERIENCE
Steele, Garland W., P.E., P.S.	YEARS OF OSR DESIGN EXPERIENCE 11	YEARS OF OSR RELATED DESIGN EXPERIENCE 36
of physical properties of soil, rock, coal materials analysis results, review physical testing laboratory rows (WVAML experience: Hampton Number Four M (Hendrickson) Subsidence; Tunnelton (Dillsworth) Phase II; Hodgesville Waterline Extension Feasibil Director of the Materials Control and Soil and Testi projects and goals.  Related AML Design: Director, Materials Control, this Division which had six major sections – Structuall physical and chemical materials testing perform Geotechnical Units. At its peak, Mr. Steele supervimade significant contributions to many professions Glady Fork Mining Permit D-35-82; WVCA: Fis	Againtenance; Price Hill Airshaft/Buildings; Landslide; Arlington (Cox) Drainage; Sauls R lity Study (I.D. No. 275); Charles and Donice and Division of the WV Department of Highway Soil and Testing Division (1965 - 1977), WV ural Steel, Concrete, Bituminous, Soils, Aggreemed by the Department as needed by the Department as needed by the Department as a lorganizations (ASTM, AASHTO, and TRI sher-Mill Creek Bank Stabilization, Laurel I lley Bank Stabilization, North Fork Hughes Enject.	Indimplement subsurface investigation work. In-field testing tory physical testing. Data entry and review slope stability. Weaver Portals and Highwall, Phase I and II; Fairmon Run Strip and Landslide; Old Bridgeport Hill Mine Drainage McElwain Waterline Feasibility Study (I.D. No. 271). A ays, he coordinated several WVAML projects with WVDOF Department of Highways, For 12 years, Mr. Steele manage egates, and Administrative. The Division was responsible for partment's Construction, Maintenance, Traffic, Design, and tely 250 technical and professional personnel. Mr. Steele has B) involved with developing materials criteria. SPEC REC Lake Sediment Removal, Kraut Creek H&H Investigation River Bank Stabilization, Spencer Flood Plain Improvement
MEMBERSHIP IN PROFESSIONAL ORGANIZA	TIONS	REGISTRATION (Type, year, state)
Member, American Society for Testing and Mar	AND THE RESERVE OF THE PARTY OF	Registered Professional Engineer, 1960, West Virginia
Committee on Standards (Past Chairman), Concrete	,	Registered Professional Engineer, 1960, West Virginia
American Association of State Highway and Tr		Licensed Professional Surveyor, 1999, West Virginia
Materials (Past Vice-Chairman), Material Refer		Zioniou Tioressional Salvejor, 1999, 11 set ingina
Chairman), Pipe, Culverts, Conduits, and Drains (F		
Institute; Member, West Virginia Society of Profes		
CD C 1 1 D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	G CG. 'I E .'	

of Professional Engineers; Member, West Virginia Society of Civil Engineers

	INCIPALS AND ASSOCI	ATES RESPONSIBI	LE FOR OSR PROJECT DESIGN (Furnish complete date
but keep to essentials)			
NAME & TITLE (Last, First, MI)			S OF EXPERIENCE
Yost, Donnie	YEARS OF OSR DESIG	N EXPERIENCE	YEARS OF OSR RELATED DESIGN EXPERIENCE 9
Brief Explanation of Responsibilities: Staff Engine soil, coal, and hazmat sampling; Technical report and			s; Develop Hydrologic and Hydraulic design data; Water, r engineers estimate; Develop CAD drawings.
County Commission Point Mountain Waterline Exte WVDEP- CADD Services Open End			wburg Waterline Extension Feasibility Study; Webster ier Hollow Refuse Pile; Pageton (Lambert) Portals,
EDUCATION (Degree, year, specialization) B.S., 2003, Civil Engineering Technology			
MEMBERSHIP IN PROFESSIONAL ORGANIZA	TIONS	REGISTRATION	(Type, year, state)
13. PERSONAL HISTORY STATEMENT OF PR but keep to essentials)	INCIPALS AND ASSOCI	ATES RESPONSIBI	LE FOR OSR PROJECT DESIGN (Furnish complete date
NAME & TITLE (Last, First, MI)		YEARS	S OF EXPERIENCE
Moody, Lacy D.	YEARS OF OSR DESIG	N EXPERIENCE	YEARS OF OSR RELATED DESIGN EXPERIENCE 9
Brief Explanation of Responsibilities: Staff Engine soil, coal, and hazmat sampling; Technical report an			s; Develop Hydrologic and Hydraulic design data; Water, r engineers estimate and Drafting.
WVAML experience: Tub Run Highwall and Refuse	e Phase II; Tub Run Highw	all and Refuse Phase	e I; Church Creek/ Manown Highwall.
EDUCATION (Degree, year, specialization) B.S., 20	004, Civil Engineering Tec	hnology	
MEMBERSHIP IN PROFESSIONAL ORGANIZA American Society of Civil Engineers	TIONS	REGISTRATION	(Type, year, state)

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# 14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE OSR DESIGN SERVICES:

275 Computer Workstations

3 Robotic Total Stations and 18 Surveying Electronic Total Stations

18 Field Survey Data Collectors

6 Survey Grade GPS Survey Instruments (complete with base and 2 rovers each)

AutoCAD Versions2008, 2006, 2002, 2000I, Map 4.0, Map 5.0, version 14.0

SurvCADD versions 2008, 2006, XML2, CES, 98

Eagle Point Engineering Software

AutoCAD Land Development

Bentley MicroStation with InRoads

ESRI ArcView GIS (Version 3.2) and Mapping Software (Version 8.3)

KY Pipe Water and Sewer Line Software

Haestads Water CAD Water and Sewer Line Software

Haestads Culvert Master, Flow Master, Storm CAD

Terrain Navigator with seamless WV 7.5' USGS Quads and Sure Maps by Titan Systems

North American Green Erosion Control Blanket Software

Microsoft Office, including Word and Excel

Microsoft Project Scheduling Software

Primavera P3 Scheduling Software

Corel 98 Suite

Numerous HP, Canon, and Toshiba Ink Plotters and Printers

XSTABL version 5.2 Slope Stability Software

TOTAL NUMBER OF PROJECTS:  TOTAL ESTIMATED CONSTRUCTION COST:  TOTAL ESTIMATED CONSTRUCTION COSTS: \$  16. CURRENT AML ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUBCONSULTANT TO OTHERS  PROJECT NAME, PROJECT NAME, NATURE OF FIRMS NAME & ADDRESS COMPLETION DATE ESTIMATED CONSTRUCTION COST COMPLETION DATE  TYPE & LOCATION RESPONSIBILITY OF OWNER  PROJECT NAME & PROJECT YOUR FIRMS							
							PERCENT COMPLETE
LOCATION	OWNE		FIRM'S RES	PONSIBILITY	CONST	TRUCTION COST	
	NAME & ADDRESS OF OWNER FIRM'S RESPONSIBILITY CONSTRUCTION COST  UMBER OF PROJECTS:  TOTAL ESTIMATED CONSTRUCTION COSTS: \$  RENT AML ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUBCONSULTANT TO OTHERS  TOTAL ESTIMATED CONSTRUCTION COSTS: \$  TOTAL ESTIMATED CONSTRUCTION COSTS CO						
		9					
TOTAL NUMBER OF P.	ROJECTS:		TO	TAL ESTIMATE	D CONST	RUCTION COSTS: \$	
	ECT NAME, TYPE & NAME & ADI LOCATION OWN  L NUMBER OF PROJECTS:  URRENT AML ACTIVITIES ON WHICE DIECT NAME, NATURE OF FIRMS						
	NAME & ADDRESS OF OWNER  NAME & ADDRESS OF FIRM'S RESPONSIBILITY  TOTAL ESTIMATED CONSTRUCTION COST  CURRENT AML ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUBCONSULTANT TO OTHERS  OJECT NAME, NATURE OF FIRMS NAME & ADDRESS ESTIMATED ESTIMATED CONSTRUCTION COST  E & LOCATION  RESPONSIBILITY  OF OWNER  NATURE OF YOUR ESTIMATED CONSTRUCTION COST  STIMATED ESTIMATED ESTIMATED CONSTRUCTION COST  ESTIMATED ESTIMATED CONSTRUCTION COST  ENTIRE PROJECT YOUR FIRMS						
						T TO OTHERS	
						ESTIMATED CO	ONSTRUCTION COST
TYPE & LOCATION	RESPONSIBILITY	OF C	OWNER	COMPLETIO	N DATE	ENTIRE PROJECT	
							RESPONSIBILITY
		& ADDRESS OF OWNER   NATURE OF YOUR   ESTIMATED   PERCENT COMPLETE					
			10 50				

PROJECT NAME, TYPE & LOCATION  Tub Run Highwall and Refuse Phase II  Tub Run Highwall and Refuse Phase I  Tub Run Highwall and Refuse Phase I  Tub Run Highwall and Refuse Phase I  WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340  Tub Run Highwall and Refuse Phase I  WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340  Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  NAME & ADDRESS OF OWNER  ESIMATED CONSTRUCTION COST (YES OR NO)  \$ 2,800,000  \$ 2,800,000  \$ 2,300,000  NO  NO  NO  2011  No  NO  NO  NO  NO  NO  NO  NO  Charleston, WV 25340	
Tub Run Highwall and Refuse Phase II  WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340  WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340  Tub Run Highwall and Refuse Phase I  WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340  Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Mine Lands 601 57th St. SE, Box 20	ED
Phase II  Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340  Tub Run Highwall and Refuse Phase I  WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340  Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  Mine Lands 601 57th St. SE, Box 20 Mine Lands 601 57th St. SE, Box 20 Mine Lands 601 57th St. SE, Box 20	)
Tub Run Highwall and Refuse Phase I  Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  WVDEP, Office of Abandoned S 2,300,000  WVDEP, Office of Abandoned \$ 2,300,000  \$ 2,300,000  \$ 2,300,000  And S 2,300,000  S 2,300,000  S 2,300,000  S 2,300,000  And S 2,300,000  S 2,300,000  And S 2,300,000  And S 2,300,000  S 2,300,000  And S 2,300,000  A	
Charleston, WV 25340  Tub Run Highwall and Refuse Phase I  WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340  Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  WVDEP, Office of Abandoned N/A  WVDEP, Office of Abandoned N/A  Mine Lands 601 57 <sup>th</sup> St. SE, Box 20	
Tub Run Highwall and Refuse Phase I  WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340  Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20	
Phase I  Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340  Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  Mine Lands 601 57 <sup>th</sup> St. SE, Box 20  N/A  2011 No 601 57 <sup>th</sup> St. SE, Box 20	
Phase I  Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340  Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  Mine Lands 601 57 <sup>th</sup> St. SE, Box 20  N/A  2011  No 601 57 <sup>th</sup> St. SE, Box 20	
Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  Extension Feasibility Study, St. SE, Box 20  Extension Feasibility Study, St. SE, Box 20  Extension Feasibility Study, St. SE, Box 20	
Charleston, WV 25340  Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  Charleston, WV 25340  WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20	
Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392  WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20	
Extension Feasibility Study, Mine Lands I.D. No. 392 601 57 <sup>th</sup> St. SE, Box 20	
Extension Feasibility Study, Mine Lands I.D. No. 392 601 57 <sup>th</sup> St. SE, Box 20	
I.D. No. 392 601 57 <sup>th</sup> St. SE, Box 20	
Charleston, WV 25340	
William G. T. D. T. WINDED ON G. CALL I. I. N.	
Webster County Point WVDEP, Office of Abandoned N/A 2011 No	
Mountain Waterline Extension Mine Lands  Footbillite Studen LD No. 384 (01.57th St. SE. Berr 20.	
Feasibility Study, I.D. No. 384 601 57 <sup>th</sup> St. SE, Box 20	
Charleston, WV 25340	
Greenbrier Hollow Refuse WVDEP, Office of Abandoned \$ 712,000 2011 No	
Mine Lands	
601 57 <sup>th</sup> St. SE, Box 20	
Charleston, WV 25340	

Sauls Run (Carpenter) Landslide	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$ 450,000	2011	Yes
Pageton (Lambert) Portals	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$ 1,100,000	2011	No
WVDEP Mapping Contract – South Region	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	N/A	2011	No
Birds Creek Number Four	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$ 999,000	2011	Yes
Bergoo Waterline Extension Feasibility Study, I.D. No. 351	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$1,788,000	2011	No
Lewis County EDA Waterline Extension Feasibility Study, I.D. No. 374	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$2,276,000	2011	No

Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$259,600	2011	No
WVDEP Mapping Contract – North Region	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	N/A	2011	No
Church Creek/Manown Highwall	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$ 2,500,000	2011	Yes
Racine (Bradshaw) Portals	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$ 410,000	2010	Yes
Hampton Number Four Maintenance	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$ 850,000	2010	Yes
Howesville Sites	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$575,000	2009	Yes

Sandy Run Highwall and Portals	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$493,000	2009	Yes
Price Hill Airshaft and Buildings	WVDEP, Office of Abandoned Mine Lands 601 57 <sup>th</sup> St. SE, Box 20 Charleston, WV 25340	\$575,000	2009	Yes

18. COMPLETED AML WO		YEARS ON WHICH YOUR FIRM HAS B IRM WAS RESPONSIBLE)	BEEN A SU	B-CONSULTANT TO	OTHER FIRMS						
PROJECT NAME, TYPE & NAME & ESTIMATED CONSTRUCTION COST LOCATION ADDRESS OF OF YOUR FIRM'S PORTION (YES OR NO) WITH											
	OWNER		***								
Virginia Office of Special Red Stantec can provide one-stop from field surveys, site desig contract completed in-house rock, and coal that have exp with highwall reclamation of and disposal plan, and re investigations, H & H stud invoicing procedures. Stante 8 AML Related projects for	clamation.  p shopping for the Wen, CADD operations  c. Stantec carefully selections are extremely are extremely mine sear experience and drastic dies, construction planes has corporate expert the West Virginia	est Virginia Abandoned Mine Lands Progress, water testing, hazmat testing, calculation lected sub-contractors, successfully used in the emely familiar with WVAML Projects. Stalls, drainage control structures and facilitically disturbed areas. Stantec also has and specifications, calculations, conductions on 45+ WVAML Projects, and 10+ Conservation Agency. Stantec personne	gram. Work ns, plans, a n the past, antec has l ies, passive EOI-expendeding associating association a	k, including surveying, nd specifications assoc to perform drilling and EOI-specific corporate treatment of AMD, drience in surveying a stated bid meetings, and ML projects. In additionant of current develop	development of mapping iated with this task order I chemical testing of soils, and employee experience ebris and waste handling nd mapping, subsurface and necessary reports and on, Stantec has completed oments and technological						
has attended the WV Surfacin Athens, OH; West Virgin	ce Mining Task Force nia University Natura	e Symposium in Morgantown, WV; the Na Al Stream Restoration Program in Morga	ational Ass ntown, W	ociation of Abandoned	Mine Lands Symposium						
LOCATION ADDRESS OF OF YOUR FIRM'S PORTION (YES OR NO) WITH											
Printed Name: Richard L. C	Saines, PE										

Carson One Mining, LLC O-4-84, Glady Fork Mining, Inc. D-35-82 & U-60-83 DEP16488

Little Coal Fish &	С	2								Х	Х	Х	Х					Р			
Habitat Surveys Sauls Run Landslide	С					Х	 		X		Х			Х	Х			Р	Р		
Town of Newburg Waterline Extension Feasibility Study	С					x				X					Х		Р	Р			
Racine (Bradshaw) Portals	С		Х		Х	Х			X		Х			X	X		Р	Р	-		
Hampton #4 Maintenance	С		Х	Х		Х		X	X		X			X	X		Р	Р	Р		
Lennox/Cuzzart Waterline Extension Project	С								×		Х	Х			X	M					
Hudson to Stateline Waterline Extension Project	С								X		×	X			×	M					

Attachment "C"

Revised 6/8/2012

<sup>\*</sup>List whether project experience is corporate or personnel based or both

\*\* Use this area to provide specific sections or pages if needed for reference

\*\*\* List primary design personnel and their functional capacity for the projects listed.

Carson One Mining, LLC O-4-84, Glady Fork Mining, Inc. D-35-82 & U-60-83 DEP16488

						(	OSR a	ind RI	ELATE	D PR	OJEC'	TEXI	PERIF	CNCE	MAT	RIX										
								PR	OJECT E	XPERIE	ENCE RI	EQUIRE	EMENT	S							Primary *** M-N	staff partici lanagement	P-Profess	acity sional		
PROJECT Exp. Dasis C-Corp P-Personal Section ***	Additional info provided in Section (s)	Forfeited Surface Mine Reclamation	Forfeited Deep Mine Reclamation	Portal/shaft closure	Hydrologic/Hydraulic design/ Eval	Remining Evaluation	Mine / refuse fire abatement	Subsidence investigation/ mitigation	Hazardous waste disposal	Project specifications	Water quality evaluation /mitgation replacement	Construction inspection / management	Water treatment	Equipment /structure removal	Stream restoration	Geotechnical/stability	NPDES/ Stormwater preparation	Richard L. Gaines, PE	Donnie Yost	Mark Cvechko	Garland Steele, PE	Stan Harris, PE	John Banton, PE	Eric Kistner, PE	Hugp Aparicio, PE	
Tub Run Highwall	С	2	X	T	X	Х	Γ	T	Х	T	Х	X	Х	T			X	Х		P	Р					
and Refuse Phase II Tub Run Highwall and Refuse Phase I	С	2	X		X	X			X		Х	X	X				Х	Х		Р	Р					
Greenbrier Hollow Refuse	С	2	X		X	X			X		X	X	Х				Х	Х		Р	P					
Pageton (Lambert) Portals	С	2	X		Х	Х			Х		Х	Х	Х	Х			Х	Х		Р	Р					
Birds Creek #4	С	2	X		X	X			X		X	X	X	X			X	X			Р					
Church Creek/Manown Highwall	С	2	X	X	Х	Х			X		X	X	Х	X			Х	X			Р					
Howesville Sites & Sandy Run Highwall & Portals	С	2	X	X	Х	Х			Х		X	X	×	X			X	X			P					
Weaver Portals and Highwall, Phase I & II	С	2	X	X	X	Х			Х		Х	Х	X	X			X	X		Р	Р	Р				
Abandoned Underground Mine Inventory and Risk Assessment Statewide Database Population	С	2					X		X								X	X					М	P	М	P
Wayne National Forest Abandoned & Inactive Mine Lands	С	2					Х		Х			Х					Х	Х					М	М	Р	P
Upper Coldwater Fork Stream Restoration	С	2								X		X	Х	X		×		X								P
Oxford Mine Mitigation Monitoring	С	2					X		X	X				Х		X							M	М	Р	
Little Coal River Stream Restoration	С	2								X		×	X	Х		X		Х			Р	4				

Revised 6/8/2012