

EXPRESSION OF INTEREST

Denmar Correctional Facility Replacement of Two Water Storage Tanks

Prepared for:

**State of West Virginia
Department of Administration
Purchasing Division
Building 15
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Project No. 0102-12-0052

January 24, 2012

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PURCHASING DIVISION
STATE OF WV

POTESTA

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EXPRESSION OF INTEREST

Denmar Correctional Facility Replacement of Two Water Storage Tanks

1.0 INTRODUCTION

Potesta & Associates, Inc. (POTESTA) is pleased with the opportunity to present this Expression of Interest. We understand that our professional services for the project include, but are not limited to, preliminary engineering, design of the project, preparation of bidding and contract documents, participation in the solicitation and evaluation of bids, surveying and mapping, preparation of necessary permitting and environmental clearance documents, geotechnical services, and construction administration/construction observation.

2.0 CORPORATE OVERVIEW, STAFFING AND WORKLOAD

POTESTA is an engineering and environmental consulting firm, located in Charleston, West Virginia, providing professional services to deliver innovative, cost-effective solutions to complex problems. We have branch offices in Morgantown, West Virginia and Winchester, Virginia. Our firm is multi-disciplinary and has a diversified practice covering engineering (civil, chemical, environmental, geotechnical, and mining), surveying, permitting, site characterization and remediation, and general environmental consulting. Services associated with water systems projects are an area of strength for POTESTA. We have worked on numerous large and small projects throughout West Virginia. Our 15 registered professional engineers have over 250 years of experience among them and are supported by a large group of engineers, designers, scientists and surveyors. POTESTA's large staff of over 90 engineers, surveyors, designers, support and others personnel will ensure that the project is adequately staffed with experienced design professionals.

Our clients include public service districts, county commissions, municipalities, manufacturers, utility companies, waste management companies, architects, engineering design firms, attorneys, financial institutions, insurance companies, land developers, construction companies, chemical and mining companies, and local, state, and federal government agencies.

We carry a full line of insurance coverage including general liability, errors and omissions, and workers' compensation. We use stringent quality control procedures to provide our clients with quality projects.

POTESTA takes pride in our ability to provide clients with innovative and concise engineering design packages that will allow more of your money to be spent on actual construction rather than engineering design fees. Although POTESTA employs over 90 people, our corporate structure with low overhead allows our rates to be competitive with those of smaller firms.

On the other hand, our large, experienced staff allows us to respond quickly, provides flexibility, and will provide for the opportunity of high level input from in-house experts on complex multi-disciplinary projects. Our normal method of staffing projects is to assign a small project team with total responsibility for completion of the work to the client's satisfaction and budget. Where necessary, the team can draw on the expertise available within POTEESTA's large staff.

POTEESTA has the ability to complete every facet of the project from beginning to end, from the preliminary (i.e., planning) study through final design and construction observation/management. Our staff members are routinely involved in the preparation of construction documents including participation in the bidding and construction phases of the project.

POTEESTA's engineering design department consists of 25 engineers, 15 who are registered professional engineers, with a combined design experience of well over 250 years. The diversity of our engineers' experience plus that of our CADD designers, field technicians, and construction monitors allows us to assemble cost-efficient, practical designs.

POTEESTA will perform surveying required for this project using in-house personnel. POTEESTA has three licensed professional surveyors. Our surveyors are experienced in all aspects of surveying, such as topographic mapping, boundary and property surveys, courthouse research, rights of way, and construction surveys for layout of work, record drawings, and quantity measurements.

POTEESTA's construction monitoring personnel are experienced at water line extension and replacement projects, and numerous other civil, geotechnical, and environmental engineering projects, including adherence to specifications, pay quantity verification and dispute resolution. We have successfully completed many projects from start to finish.

The project manager will be responsible for monitoring the project budget. POTEESTA's staff submits time sheets on a weekly basis. All charges including labor hours and other project expenses are compiled in our accounting center and distributed to the project manager during the following week. In this manner, the project manager can keep close track of costs. In addition, field representatives routinely keep track of subcontractor costs on a daily basis. Thus we can, in effect, keep track of the total project costs on a weekly basis. Our subcontractors commonly invoice at monthly intervals and there is seldom any discrepancy between our field representative's pay items and our subcontractor's invoice.

Additional information regarding POTEESTA's water, civil engineering and design, permitting, construction monitoring, and surveying capabilities are included in **Appendix A**.

2.1 Relevant Project Experience

POTESTA's staff has extensive experience in providing the services necessary for this project.

POTESTA and POTESTA's staff have extensive experience in providing the services necessary for this project. Our ongoing workload includes extensive work on water line extensions, and upgrades to water systems. Services being provided on these projects include evaluating water systems for deficiencies including obtaining the input from the West Virginia Bureau for Public Health; preparing preliminary plans (i.e., preliminary engineering reports) including estimates of construction cost; preparing environmental assessments necessary for federally funded projects; interacting with funding agencies on their requirements; hydraulic design of water lines; design of water system upgrades including line replacements; preparation of detailed drawings, specifications, cost estimates, and bidding documents; preparation of permit applications; assistance with bidding and contractor selection; and construction phase services including preconstruction meetings, review of contractor submittals, construction observation, review of contractor invoices, preparation of change orders, review of as-built drawings, and issuance of certificates of substantial completion.

Examples of our similar projects are as follows:

Town of Ceredo Municipal Water Department Distribution System Upgrade

POTESTA was retained by the Town of Ceredo to provide design, permitting, and construction administration/observation services for their water distribution system located in and around Ceredo, Wayne County, West Virginia. The project included approximately 20,000 linear feet of water line, as well as other improvements including the replacement of the Town of Ceredo's reservoir with two new water storage tanks and construction/renovation of booster stations. Work was constructed under budget.



City of Philippi Municipal Water System Upgrade



In this project, POTESTA evaluated the City of Philippi's water system, and along with the City of Philippi and the West Virginia Bureau for Public Health identified deficiencies in the system, prepared a preliminary engineering report, assisted the City of Philippi in obtaining federal funds and obtaining permits, and prepared drawings, specifications, cost estimates, and bidding documents for the upgrades. Included in the upgrades was replacement of existing controls for water storage tanks with

telemetry systems, and upgrades (or replacements) for waterlines, booster stations, and water storage tanks. This project was primarily funded by the United States Department of Agriculture, Rural Utility Services (RUS). Construction is ongoing. Additional construction is anticipated via the use of contingency funds.

City of Wellsburg Water System Improvement Project

POTESTA was hired by the City of Wellsburg to assist with improvements to their existing potable water treatment, storage and distribution system. Improvements included replacement of a cover on their potable water storage reservoir, replacement of existing distribution lines, replacement of new installation of valves throughout the City to allow for isolation of sections of the City, and upgrades to their aging water treatment plant. Plant improvements included replacement of the upflow clarifier, filter media replacement, plant control system, upgrades to the chemical feed systems, and chemical feed systems, revisions to the aerator and upgrades to the electrical system.

POTESTA's scope of work included preparation of a preliminary engineering report (PER) and West Virginia Infrastructure and Jobs Development Council (IJDC) application, design, preparation of construction drawings and technical specifications, assistance with bidding, and construction management/observation.

Total cost of project is expected to be approximately \$2.4 Million and construction is scheduled to start in 2012.

Coolfont Development – Berkeley Springs, West Virginia

POTESTA's services were retained by a private developer, Carl M. Freeman Communities, to provide engineering and environmental services required for the redevelopment of the Coolfont Recreation property in Morgan County, West Virginia. The property included and existing lodge, spa, lake, chalets, campground, and associated recreational facilities. Carl M. Freeman's plan was to create an upscale second home community with high end amenities. POTESTA's services included pre-acquisition services such as a property boundary/ALTA survey and a Phase I Environmental Site Assessment for the original 997-acre tract. POTESTA also provided an engineering evaluation of the current utility facilities for sanitary sewer treatment, as well as the existing groundwater wells and water storage systems.

Engineering services on this project included the permitting and design of a sanitary sewer waste treatment plant, as well as locating, installing and constructing of three new high-capacity water wells to serve the planned community with a potable water source. POTESTA also worked with the project planners to provide design details, profiles and plan layout for the facility access roadways including several vehicle and pedestrian bridges. The existing lake which was located on the property was evaluated by the engineering staff for rehabilitation which included the alteration of the current dam structure to enlarge the current facility. A planning study was also completed by POTESTA to study the development of a second lake located downstream of the current facility.

POTESTA design team members were involved in several public meetings to provide technical input and responses.

Cabell County Water Line Extensions

POTESTA was selected by West Virginia American Water (WVAW) for engineering and construction related services for the 23-mile long Cabell County water line extensions (Contract Nos. 6 and 7). Included in the project were development of mapping including location of existing utilities, field work to locate the proposed water line, hydraulic design of the water lines, design of pressure reducing valves and booster stations, preparation of plans and construction cost estimates, preparation of necessary regulatory permit applications, and construction administration services such as full-time construction observation, review of shop drawing submittals, review of contractor invoices, and preparation of record drawings. The project was partially funded by federal agencies (i.e., Small Cities Block Grants).

Lick Creek Water Line Extension – Phase I

POTESTA was retained by the Boone County Public Service District (BCPSD) to prepare funding applications, drawings, permit applications, and provide construction administration/observation services for a 4.5-mile water line extension in Boone County. Project costs came in under budget, so additional water line was constructed.

Prenter Road/Route 5 Area Water Line Extension – Phase I

POTESTA was retained by the Boone County Public Service District (BCPSD) to prepare funding applications, drawings, permit applications, and provide construction administration/observation services for an approximate 42,000-linear foot water line extension in Boone County. This project has received “national” exposure, and hence has a high public profile. The project was completed under budget.

Boone County PSD Projects

POTESTA was retained by the BCPSD to prepare design drawings and permit applications for numerous water line extensions to be constructed by BCPSD personnel. These included:

- ◆ Stephens Auto/Betsey Lane
- ◆ Trace Branch at Robinson
- ◆ Six Mile Extension to Corridor G
- ◆ Stollings Road
- ◆ Joes Creek – Phase I
- ◆ Joes Creek – Phase II*
- ◆ Long Branch*
- ◆ Joes Creek – Phase III

* *Included booster station.*

The extensions ranged from approximately 2,500 feet to 9,000 feet in length, and included booster stations. Six of the extensions have been constructed.

In addition, we completed an inventory of remaining countywide extensions in 2005, which was revised in 2010.

River Bend Road Water Line Extension

The River Bend Road Water Line Extension Project was an owner installed water line project. POTE STA's services for this project consisted of hydraulic calculations, construction drawings, technical specifications, and permit application preparation services. The project required permits to be obtained from the West Virginia Department of Health and Human Resources, West Virginia Department of Environmental Protection, and West Virginia Division of Highways. The project consisted of 2,400 feet of 6-inch line, 5,050 feet of 4-inch line, and one fire hydrant.

2.2 Qualifications of Personnel

Mr. Dana L. Burns, P.E., Vice President at POTE STA, will serve as principal-in-charge for the proposed work and the back up point of contact for projects. He is POTE STA's Vice President of Engineering. If Mr. Sharp is unavailable he will perform his tasks and ensure the projects are on schedule. Mr. Burns has over 30 years of experience with civil and environmental engineering projects.

Mr. David B. Sharp, P.E., will serve as the project manager for the proposed work and is the Branch Manager of POTE STA's Morgantown office. He is a native of Pocahontas County, West Virginia and has over 15 years of experience with engineering and environmental consulting projects in West Virginia. He obtained his Bachelors and Masters Degrees from West Virginia University and has spent a large part of his career involved with geotechnical engineering, construction observation/management, and municipal projects. In addition to providing technical guidance throughout the project, Mr. Sharp will be responsible for maintaining the schedule and budget for the project.

Mr. Scott Copen, P.E., will serve as the primary design engineer. Mr. Copen has over 12 years of design experience is a licensed professional and a graduate of the WVU College of Engineering and Mineral Resources with a Bachelor's and Master's Degree in Civil Engineering. He has been involved in several aspects of Civil Engineering with special interests in water resources. Responsibilities have included projects involving civil site design, transportation, construction traffic control plans, hydrologic and hydraulic investigations and design, erosion and sediment control design, and right-of-way preparation and acquisition. As a Senior Engineer for the Morgantown Utility Board Mr. Copen also has an extensive background in municipal water, sanitary, and storm water design and operations.

Mr. Patrick A. Taylor, PE, will serve as a technical advisor for the project, if necessary. Mr. Taylor has substantial experience on similar projects as follows:

- ◆ Permitting Program: Directed review and issuance of public water and wastewater, public swimming pool, agricultural waste construction permits and vending machine permits.
- ◆ Drinking Water Treatment Revolving Fund and State Tribal Assistance Grant Programs: Directed overseeing loan and grant administration including technical and financial review; project selection; coordination with appropriate federal and state agencies (environmental and funding) and public water systems; coordination of bid advertising, loan closing, construction administration (processing of invoices, change orders, etc.); and water system adherence to loan conditions. Program responsible for preparation of program grant applications and reporting to EPA including: annual reports, disadvantaged business enterprise reports, and intended use plans. Program responsible for oversight of 2 percent technical assistance grant with the West Virginia Rural Water Association which provides continuing education to water treatment plant operators and oversight of the 4 percent administrative set-aside to Water Development Authority in financial management of the Drinking Water Treatment Revolving Fund.
- ◆ Capacity Development Program: Directed, assessed, reported on and provided assistance on the technical, financial and management capabilities of public waters systems. Responsible for the oversight of program adherence to capacity development strategy, Governor's report, and annual reports to the EPA.
- ◆ West Virginia Infrastructure and Jobs Development Council: Former sitting member on the Infrastructure Council. Oversight of water technical review committee for infrastructure water projects and member of sewer committee, and sitting member of the funding committee. Oversight of technical assistance/review for infrastructure water projects and wastewater preliminary applications; representing Bureau for Public Health in committee and council meetings.
- ◆ Private Practice Consulting: Management and design of multiple water line projects, including clients such as Lincoln County PSD, Logan County PSD, City of Kenova, Birch River PSD, and Town of Kermit. Water line projects included varied line sizes, tanks, pump stations, and pressure-reducing valves.

Dr. L. Eli McCoy can serve as a "backup" liaison with regulatory agencies, such as the West Virginia Department of Environmental Protection - Water Resources Section, if necessary. He served for two years on the council, and understands what it takes to get a project successfully funded. In addition, he served as chief of the Water Resources Section and is capable of negotiating NPDES permit conditions, if necessary.

Mr. Brian Burns, P.E., will serve as a staff engineer for various tasks within the scope of service outlined. Mr. Burns is a licensed professional engineer and has seven years full time experience working on projects with various size and scope, including geotechnical evaluations, civil/site design (residential, commercial, student housing), road design, storm water conveyance and detention, sanitary sewer and potable water design, permitting (including environmental and regulatory), acid mine drainage treatment and abandoned mine land reclamation. He has been involved throughout the aspects of projects with similar size and scope, from conceptual services, design and permitting, construction bid packages preparation and evaluation, and contractor selection, as well as construction observation and construction administration type activities through the completion of projects.

Mr. Victor Dawson, P.S., will be responsible for managing the surveying crews and will provide surveying support as required for the various assignments. He has worked on numerous water line projects, including topography/property boundaries for water storage tanks and booster stations.

Messrs. Robert Lamm, Pat Love, and Charles Shaffer are POTE STA's proposed construction technicians. Mr. Lamm has completed construction observation for several recent water line extensions, including the Fisher Ridge Water Line Extension – Phase II project, another 2.5-mile water line extension in Logan County, and upgrades to the Town of Ceredo Water Distribution System. Mr. Love has served as the resident project representative (RPR) for the Lick Creek Water Line Extension – Phase I and Prenter Road/Route 5 Area Water Line Extension – Phase I project. Mr. Shaffer has completed construction observation for numerous water line extensions, including portions of the Poca River Road water line extension.

3.0 PLAN OF APPROACH

POTE STA's typical plan of approach follows:

3.1 Start-up Meeting

POTE STA's project leader will meet with the Denmark Correctional Facility to discuss the issues pertaining to the water and wastewater system repair and improvements.

3.2 Development of Scope of Services

POTE STA will work with the Denmark Correctional Facility to develop a successful approach to the project. Input will also be considered from the funding agency and the West Virginia Bureau for Public Health (WVBPH), if necessary.

3.3 Preliminary Design

If necessary, POTEESTA will prepare a preliminary engineering report (PER) and funding agency application. For some projects this may not be necessary. PERs will include evaluation of alternatives, drawings showing served areas and cost estimates.

3.4 Environmental Assessment

POTEESTA will prepare an environmental assessment for the project, if necessary. The environmental assessment is required by federal funding agency(ies). "Clearance" letters will be obtained from necessary federal and state agencies. POTEESTA will assist in publishing the required public notice, and other public statements, if necessary. Once clearance letters have been received, POTEESTA will prepare and submit the environmental assessment to the appropriate funding agency. It is anticipated that the funding agency will prepare a finding of no significant impact (FONSI).

3.5 Final Design and Specifications

POTEESTA will proceed with the final design and preparation of project specifications for the project once the Denmark Correctional Facility has concurred with the preliminary design. The design can be flexible and POTEESTA will adjust the design accordingly as the situation and/or funding may dictate. Construction drawings and specifications will be prepared for regulatory and funding agency and the Denmark Correctional Facility review and approval prior to advertisement and bidding.

3.6 Construction Cost Estimate

POTEESTA will prepare a preliminary estimate of probable construction cost broken down by major work item. The preliminary estimate will be submitted with a draft submittal of the drawings and specifications. A final estimate of probable construction cost will be prepared and submitted with the construction drawings. The final estimate will be used for evaluation of project costs and subsequent contractor bids.

3.7 Permitting

Several permits and/or permit modifications could be required for Denmark Correctional Facility projects. These could include a West Virginia Department of Transportation (WVDOT) Highway Occupancy Permit, NPDES General Stormwater Permit, West Virginia Department of Health and Human Resources Permit, United States Army Corps of Engineers and West Virginia Public Lands Corporation permits. In addition, a permit may be required from the railroad if a crossing is proposed.

POTEESTA will prepare the above permit applications for the Denmark Correctional Facility execution.

3.8 Right-of-Ways

If necessary, POTEESTA can provide surveying or other services necessary to obtain right-of-ways for the project. POTEESTA's surveying staff is experienced at preparing plats, descriptions, and field staking for easements and property transactions.

3.9 Bidding Documents Preparation/Bidding Assistance

POTEESTA will prepare a construction bid form and required bidding (i.e., contract) documents, and will assist the Denmar Correctional Facility in the appropriate procedures regarding advertisement and procurement of bids. POTEESTA will also help present the project at a pre-bid meeting. Upon receipt of bids, POTEESTA will aid the Denmar Correctional Facility in evaluation of the bids for cost, completeness and qualifications.

3.10 Construction Administration/Observation

After bid evaluation and contractor selection by the Denmar Correctional Facility, POTEESTA proposes to complete the following construction administration and observation tasks during construction. The scope of services described below is based in part on terms and requirements of the *Standard General Conditions of the Construction Contract*, prepared by the Engineers Joint Contract Documents Committee, which has been used for other projects and is assumed to be used on this project as the basis of the contract between the Denmar Correctional Facility and the contractor.

- ◆ Review contract documents, particularly items that were not prepared by POTEESTA, such as the agreement, general conditions, supplementary conditions, specification special conditions, and engineering specifications.
- ◆ Review, meet, comment on and accept contractor's preliminary (and subsequent adjustments to) progress schedule, preliminary schedule of shop drawing and sample submittals, and preliminary schedule of values (for progress payments).
- ◆ Attend pre-construction conference.
- ◆ Review underground facilities not shown on contract documents to determine potential changes to contract documents.
- ◆ Review substitutes and or equal items, and issue written acceptance/denials.
- ◆ Review and approve shop drawings and samples (if required), including review of revised shop drawings if necessary.
- ◆ Review contractor work plan, if required by specification special conditions.
- ◆ Attend progress meetings and as needed meetings.
- ◆ Issue written clarifications or interpretations of the requirements of the contract documents, including issuance of additional specifications and drawings.

- ◆ Provide a nearly full-time representative to observe construction for compliance with the contract documents, and observe testing by the contractor and record results on appropriate forms.
- ◆ Prepare weekly reports summarizing construction activities.
- ◆ Prepare change orders for the work, including issuance of additional specifications and drawings, if necessary.
- ◆ Review contractor invoices (i.e., Applications for Payment) and issue written recommendations for payment or denial.
- ◆ Issue Certificate of Substantial Completion to the Denmar Correctional Facility, as typically required by the contract documents.
- ◆ Provide record drawings showing “as-built” features.

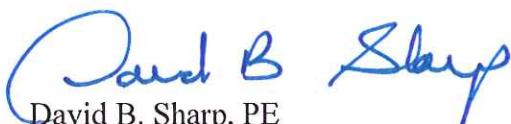
4.0 CLOSING

POTESTA is excited about the opportunity to work with the Denmar Correctional Facility on this project. POTESTA’s staff of over 90 professionals will allow us to assemble an experienced project team and complete this project in a timely and efficient manner. POTESTA has the ability to complete all of the anticipated work in-house, has designed over 300 miles of waterline extensions, has a staff member who concentrates on funding assistance, and a staff member who designed your original water plant.

We look forward to meeting with the Denmar Correctional Facility to better acquaint you with our qualifications and experience and to discuss your plans for the project.

Respectfully submitted,

POTESTA & ASSOCIATES, INC.



David B. Sharp, PE
Branch Manager

DBS:SAC/maf

POTESTA & ASSOCIATES, INC.

Civil Engineering and Design

Potesta & Associates, Inc. (POTESTA) helps clients evaluate and plan projects by completing the following types of preliminary investigations and analyses.

- Phase I Environmental Site Assessments
- Floodplain Determination
- Geotechnical Explorations Including Soil, Bedrock, and Groundwater Characterization
- Foundation Recommendations
- Monitoring Well Systems and Site Characterization Plans
- Boundary, Topographical and Photogrammetric Surveys
- Utility Planning
- Earthwork Evaluations Including Volume Analysis
- Opinion of Probable Costs/Engineer's Construction Cost Estimates

Once the project has been determined feasible, POTESTA's design professionals complete preliminary and final designs. Frequent communication is made with the client and any other design professionals to review completed activities and obtain input for the design process. Our goal is to provide our services to achieve or exceed our clients' expectations.

Our design services include:

- Erosion and Sediment Control Plans
- Earth Retaining Structures Design
- Geometric Site Layout
- Grading and Drainage Plans, Including Excavation and Fill Optimization
- Access Road Design
- Hydraulic Structure Design
- Water and Sewer Design
- Slope Stability Analysis
- Subsurface Drainage System Design
- Construction Drawings, Specifications and Contract Document Preparation

POTESTA offers experienced environmental engineers and scientists to prepare applications for various environmental permits that may be required. These services include:

- Stormwater Management Permit/Erosion and Sediment Control Plans
- Office of Air Quality Permit to Construct
- Wetland Delineation and Permits
- National Pollutant Discharge Elimination System (NPDES) Permits
- Floodplain Management Permits
- Groundwater Protection Plans
- Spill Prevention, Control and Countermeasure Plans
- Environmental Site Assessments
- Environmental Impact Statements

POTESTA routinely provides professional services throughout construction of our projects. These services include survey layout, construction management, construction monitoring, record drawing preparation, and bid evaluation assistance.



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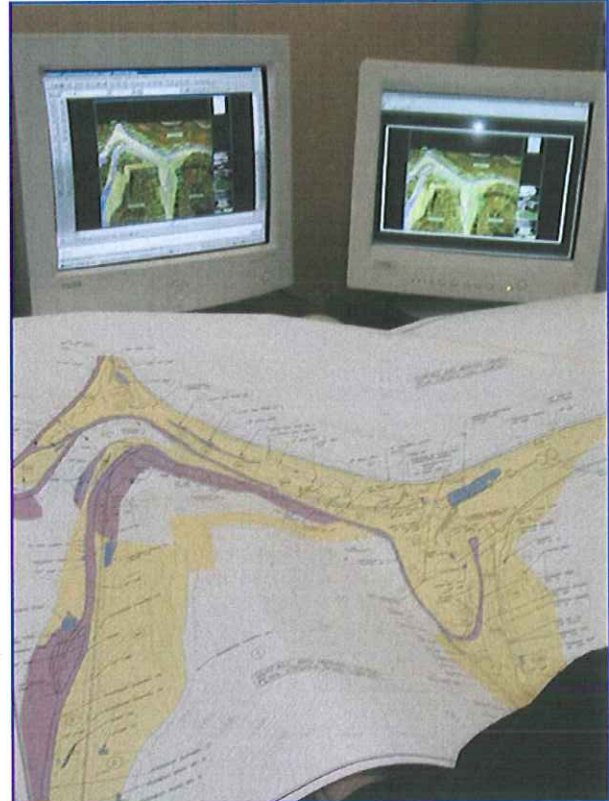
Computer Aided Drafting and Design

The Potesta & Associates, Inc. (POTESTA) computer-aided drafting and design (CADD) department provides state-of-the-art design and drafting services for in-house engineering and environmental consulting projects. We also provide personnel to clients who have a temporary need for additional drafting manpower. These services may be performed at your location or our office as required.

The CADD department utilizes the latest drafting/design software and computer hardware to maintain productivity at the high levels that clients demand and expect. We utilize AutoCAD, AutoCAD Land Development Desktop 3 civil/survey design software, and Microstation to prepare, revise, and manipulate drawings and engineering data efficiently. Drawings and figures are produced using a Hewlett Packard 1050c Plus color ink jet plotter. POTESTA's experienced and trained professionals allow clients' projects and assignments to be completed rapidly and at reasonable cost.

Our CADD services include:

- Survey data manipulation including development of topographic mapping, cross sections, profiles, isopach drawings, etc.
- Site design including grading plans, drainage plans, utilities plans, right-of-way plans, etc.
- Roadway design.
- Water and sewer design.
- Permit drawings, maps, and exhibits.
- Earthwork and planimetric quantity development.
- Two and three dimensional graphics.



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POTESTA & ASSOCIATES, INC.

Construction Monitoring

Potesta & Associates, Inc. (POTESTA) provides construction monitoring and construction management services to assist clients in achieving regulatory and contractual compliance, to document that contractor activities are in compliance with design requirements, and to serve as an extension of clients' staff. POTESTA can provide full-time or part-time field services utilizing one or more engineers or technicians.

Regulatory compliance is often best documented by providing full-time construction monitoring services for a construction project. POTESTA can assist clients in observation of construction activities and documenting compliance. Our typical involvement in such projects includes:

- Conducting a pre-construction review of design and contract documents to identify potential problem areas, and consultation with the owner or client to develop strategies or procedures to avoid anticipated problems.
 - Assistance in contractor selection. POTESTA can recommend construction contractors who specialize in the type of work associated with the project and can assist in bid evaluation by reviewing proposed quantities, unit costs, lump sum costs, and any proposed exceptions or qualifiers for the project. POTESTA can conduct pre-bid conferences to help contractors understand project requirements. We can also conduct pre-construction conferences prior to the start of the project to help establish lines of communication, review detailed plans, discuss testing requirements and establish proper reporting procedures.
- POTESTA can provide surveying for construction layout, measurement for payment quantities, and documentation of as-built conditions. Survey results are downloaded to form computer-aided drafting (CAD) drawings allowing the efficient preparation of record drawings and any subsequent evaluations required.



- Construction monitoring can include field testing to document compliance such as field density tests, concrete testing, sampling of materials for laboratory analysis, and documentation of site conditions and work performed on a daily basis or as required.
- Preparation of summary of construction reports including photographs, videotape documentation, test results, daily construction logs, industrial hygiene monitoring, and other documentation as may be required by the client.
- Preparation of certifications as may be required.



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POTESTA & ASSOCIATES, INC.

Geotechnical Engineering

Potesta & Associates, Inc.'s (POTESTA) engineers and geologists have extensive experience related to the geotechnical engineering and geological disciplines. These areas include subsurface investigations, monitoring well and piezometer installations, foundation design recommendations, slope stability analysis, and remedial designs as they relate to construction, mining, waste disposal, environmental remediation, and other projects.

SUBSURFACE INVESTIGATIONS

POTESTA's diverse staff of engineers and geologists is experienced in the many different facets of subsurface investigations. Our usual procedure is to attend an initial meeting with the client to establish requirements and expectations, conduct a preliminary site reconnaissance, and develop a recommended exploration program for your review and approval. Supplemental information from the local area is then obtained from readily available sources to assist the engineer or geologist in making final recommendations.



POTESTA can provide field engineers and geologists who are knowledgeable using the latest technologies to assist in collecting and analyzing samples. Our knowledge of the proper procedures and familiarity with local conditions allows office

and field personnel to adjust the investigative plan if unanticipated field conditions are found.

Our staff is familiar with the following items which can be associated with subsurface exploration:

- Drilling and Rock Coring Techniques (augers, rotary bits, Geoprobe™, etc.)
- Sample Collection Methods (split spoons, shelly tubes, Geoprobe™ sleeves, etc.)
- Classification and Logging of Soil and Rock Samples
- Monitoring Well and Piezometer Installation

SLOPE STABILITY ANALYSIS AND REMEDIAL DESIGN

Slope stability is often a major concern during the design and construction phases of many projects, especially those located in the Appalachian terrain. POTESTA's engineers are familiar with the various methods utilized to predict slope stability and are capable of performing the related analyses. Slope stability is critical for many projects such as analysis of existing or proposed soil embankments, rock fills, dam analysis and design, landfill design and operation, estimating the causation of slope failure, and designing remedial measures. Analyses can involve circular or sliding block methods, interface friction angles, and estimation of the strength parameters of the soil or rock. Slope stability analyses are performed on one of the most technologically advanced computer programs available and can be modified using site specific data.

POTESTA's engineers can also develop preventive measures during initial project design or recommendations to repair slope failures. Based upon the project circumstances, our engineers will consider various remedial measures such as regrading the site to obtain more suitable conditions, management of groundwater, and design of retaining



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Regional Offices: Morgantown, West Virginia and Winchester, Virginia

structures. Our staff is familiar with a wide variety of retaining structures, including gabion baskets, soldier beam and lagging walls, sheet piles, reinforced concrete and reinforced earth slopes.



FOUNDATION DESIGN RECOMMENDATIONS

POTESTA's staff has experience with various types of foundations and will recommend the appropriate type of foundation given the anticipated application and site conditions. The different types of foundations with which our staff is familiar are spread and strip footings, steel piles, auger-cast concrete piles, drilled piers, and reinforced mats.

Preliminary foundation design recommendations and cost analyses are commonly performed during the initial phases of a project to assist in determining project feasibility. As project planning progresses, the preliminary alternatives will be revised into a final recommendation which can then be incorporated into the project's construction documents or developed as an independent package for presentation to the contractor.

The final recommendation can include construction drawings, technical specifications, recommendations for allowable bearing capacity, engineer's construction cost estimate, and contractor's bid sheet.



POTESTA & ASSOCIATES, INC.

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POTESTA & ASSOCIATES, INC.

Surveying and Mapping

Our surveyors are experienced in many aspects of surveying such as topographic mapping, boundary surveys (rural/farms, city lots, and subdivisions), ALTA surveys, control surveys, flood certificate surveys, well location surveys, construction surveys for layout of work, record drawings, and quantity measurements. Related areas include courthouse research, preparation of right-of-way plans, and verification of property owners. Potesta & Associates, Inc. (POTESTA) has licensed professional surveyors registered in West Virginia, North Carolina, South Carolina, Ohio, Virginia, and Pennsylvania. Their total combined surveying experience comes to well over 50 years.

POTESTA's surveyors use state-of-the-art equipment such as Topcon total stations, Trimble R-8 GNSS, and SMI Version 8 data collectors with SMI software. Reduction and design software used includes AutoCAD, Softdesk Civil/Survey design, Autodesk Land Design, Microstation, and InRoads design software.

POTESTA is equipped with modern surveying instruments, allowing efficient data processing and accurate gathering of field information. Total station instruments equipped with data collectors are utilized for complete field-to-office automation allowing for high levels of productivity in the field. The latest versions of software are then used to process survey data and create drawings or required end products. These products can be supplied to our clients in AutoCAD and/or Microstation format.

Small topographic mapping projects can be completed in-house using the aforementioned process. Larger projects are better suited for mapping using aerial photography.

POTESTA can provide the necessary surveying required for establishing ground control for aerial mapping. As a quality control measure, aerial mapping is field checked for accuracy by surveying cross sections or random points.



Surveys completed by POTESTA are performed by or under the direction of a professional licensed surveyor. Surveys and mapping are completed to the standards outlined by the National Map Standards, as well as other applicable quality standards.

Our staff is experienced in global positioning surveys (GPS). GPS equipment, Trimble R-8 GNSS, and existing base stations are among POTESTA's surveying tools. Based upon the site location and ultimate use of the survey information, a recommendation is made to the client as to whether or not traditional survey or GPS is most applicable to their project.



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POTESTA & ASSOCIATES, INC.

Water and Wastewater Engineering

Our professional staff is dedicated to providing quality engineering services for various types of water treatment and distribution systems, as well as wastewater management, collection and treatment systems. The following is a list of some of the services Potesta & Associates, Inc. is capable of providing:



WATER AND WASTEWATER DESIGN

- Feasibility Studies
- Conceptual Design
- Final Design
- Bidding and Construction
- Construction Monitoring
- Wastewater Audits
- Wastewater Minimization Studies
- Engineer's Cost Estimates
- Small Flows Design (Traditional and Innovative Treatment Systems for Low Volume Flows)
- Sewage Collection and Treatment
- Water Treatment and Distribution
- Industrial Wastewater Treatment

- Remediation Systems
- Landfill Leachate Treatment
- Storage Tank Design
- Flow Measurement
- Surveying/GPS and Mapping
- Permitting and Regulatory Liaison
- Combined Sewer Overflow (CSO) Management, Sampling and Modeling

STORMWATER MANAGEMENT

- Hydraulic Conveyance Structure Design (Culverts, Channels, Drop Inlets, Etc.)
- Stormwater Retention/Detention Pond Design
- Stormwater Pond Modeling
- Floodplain Identification and Management Strategies
- Hydrologic and Hydraulic Analysis and Evaluations and Modeling
- Construction Monitoring
- Surveying
- Permitting and Regulatory Liaison



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TRANSMITTAL MEMO

7012 MacCorkle Avenue, SE, Charleston, WV 25304 ▪ Phone: (304) 342-1400 ▪ Fax: (304) 343-9031

To: Ms. Tara Lyle
State of West Virginia
Department of Administration
Purchasing Division
Building 15
2019 Washington Street, East
Charleston, West Virginia 25305-0130

Date: January 24, 2012

Project No.: 0102-11-0052

Sent Via: Mail Federal Express United Parcel Service
 Hand Carried Other: _____

Quantity	Description
1	Original Statement Of Qualifications for Expression of Interest Denmar Correctional Facility
8	Copies of Statement Of Qualifications for Expression of Interest Denmar Correctional Facility
Remarks:	

By: David B. Sharp, P.E.

c: _____