

DUNN ENGINEERS, INC.



Vendor / Professional Engineers

DUNN ENGINEERS, INC. 400 South Ruffner Road Charleston, WV 25314

Telephone: 304-342-3436 FAX: 304-342-7823

Email: dunneng@aol.com

Agency / Buyer:

Jessica S. Chambers, Senior Buyer
WV Purchasing Division, for
WV Army National Guard Construction and Facilities
Management Office

Submittal Location:

BID CLERK

Department of Administration Purchasing Division, 2019 Washington Street East, Charleston, WV 25305-0130

Date of Submittal: August 29, 2016

Re: Professional Engineering Services
Letter of Interest for Centralized Expression of
Interest (CEOI) No. 0603 ADJ1700000004

Description of Projects:

Provide Professional Engineering Services for:

Joint Forces Headquarters at the Coonskin Complex, in Charleston, West Virginia: to provide for a complete system inventory and vulnerability assessment of the existing infrastructure for water and sewage systems as needed, at the Joint Forces Headquarters Complex, located at 1703 Coonskin Drive, Charleston, WV 25311, and to provide a prioritized approach with conceptual costs for redundant water and sewage systems at this location.

Camp Dawson at Kingwood (Preston County): to develop construction documents to provide for a complete system inventory and vulnerability assessment of the existing infrastructure for water and sewage systems as needed, at selected areas within Camp Dawson at Kingwood (Preston County), and to provide a prioritized approach with conceptual costs for redundant water and sewage systems at this location.

SEALED BID:

Redundant Water and Sewage Systems Design for JFHQ and Camp Dawson

BUYER:

Jessica S. Chambers, Senior Buyer [WV Purchasing Division]
(for AGENCY: Adjutant General / WV Army National Guard
Construction and Facilities Management Office)

SOLICITATION NO.: CEOI No. 0603 ADJ1700000004

BID OPENING DATE: Wednesday, August 31, 2016

BID OPENING TIME: 1:30 PM. EST.

FAX NUMBER:

304-342-7823 (Dunn Engineers, Inc.)

TECHNICAL PROPOSAL [ENGINEERING SERVICES]
BID SUBMITTED BY DUNN ENGINEERS, INC.

TABLE OF CONTENTS

LETTER OF INTEREST FOR THE IDENTIFIED CENTRALIZED EXPRESSION OF INTEREST (CEOI NO. 0603 ADJ1700000004). [JFHQ AND CAMP DAWSON]

BACKGROUND ON PROJECT SPECIFICS

THE AGENCY EOI

- A. AGENCY SPECIFIED PROJECT
- B. THE DUNN ENGINEERS INC. APPROACH
- C. LOCATION SPECIFIC: JFHQ (COONSKIN COMPLEX)
- D. LOCATION SPECIFIC: CAMP DAWSON (SPECIFIED AREAS)

STATEMENT OF QUALIFICATIONS AND PERFORMANCE DATA

INTRODUCTION

OVERVIEW OF STAFFING

KEY STAFF QUALIFICATIONS

PROPOSED STAFFING PLAN (INCLUDING RPRS AND SUB-CONTRACTORS)

REFERENCES

PROCEDURE FOR PROPOSED METHODS OF APPROACH

CLEAR PROCEDURE FOR COMMUNICATIONS WITH OWNER

PROJECT AND GOALS

AGENCY GOALS / OBJECTIVES No. 1 - 7 DUNN ENGINEERS INC. RESPONSES

SAMPLE PAST PROJECTS WITH SIMILAR PROJECT REQUIREMENTS

APPENDICES / ATTACHMENTS:

- A. RESUMES OF PROFESSIONAL ENGINEERS
- B. CEOI No. 0603 ADJ1700000004 SIGNED FORMS:
 - 1) ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: 1;
 - 2) DESIGNATED CONTACT, CERTIFICATION AND SIGNATURE PAGE; and
 - 3) PURCHASING AFFIDAVIT

LETTER OF INTEREST

August 29, 2016

Attn: Jessica S. Chambers, Senior Buyer West Virginia Purchasing Division

West Virginia Army National Guard Construction and Facilities Maintenance Office Redundant Water and Sewage Systems Design for JFHQ (at Coonskin Drive) and Camp Dawson CEOI No. 0603 ADJ170000004

Dear Ms. Chambers,

We are pleased to present you with our Letter of Interest, Statement of Qualifications and Experience, and Project Goals and Objectives. We are prepared to meet for an interview at any time that is convenient to you to do an oral presentation in order to clarify our proposal for your satisfaction.

Dunn Engineers takes great pride in its staff, their diverse knowledge, many years of experience, as well as the company's many project accomplishments. Our staff has over 350 years of combined experience in assessment, planning, design, permitting and construction administration of public water and wastewater utility projects. Dunn Engineers' core business is water and wastewater engineering. We have been successful in growing the company and maintaining this core business through many years without having to pursue other markets to sustain the firm.

When our client needs to accelerate a project, Dunn Engineers can deliver. This is where our size, experience, and knowledge of the regulatory agencies allow us to develop the most expeditious route to completion. Because we know that clients want completed projects; we can deliver by expediting projects to completion. We have a successful track record demonstrated by our lists of completed projects. Timely services are essential to building a responsible professional relationship.

We believe our diverse knowledge, staff and experience will provide the West Virginia Department of Natural Resources with a substantial reservoir of resources. Thank you for the opportunity to submit our Letter of Interest and Statement of Qualifications. Dunn Engineers, Inc. will provide you with the highest quality service for a competitive fee. If you have any additional questions or needs, please call us. We look forward to the opportunity to work with you.

Very truly yours,

DUNN ENGINEERS, INC.

F. Wayne Hypes, P.E., P.S.

President

BACKGROUND ON PROJECT SPECIFICS

THE AGENCY

The Agency is the West Virginia Army National Guard, Construction and Facilities Maintenance Office, which is located at WVARNG, Joint Forces Headquarters, 1707 Coonskin Drive, Charleston, WV 25311 and the Project will be completed at:

- The Joint Forces Headquarters, within the Coonskin Complex, at 1703 Coonskin Drive, Charleston, WV 25311; and,
- Selected areas within Camp Dawson, located in Kingwood (Preston County) WV 26537

a. Agency specified project

The agency is seeking the services of a qualified professional engineering firm to provide engineering design services for the West Virginia National Guard. Selected vendor will provide design services to complete a system inventory and vulnerability assessment of the existing infrastructure for water and sewage systems at the Joint Forces Headquarters at the Coonskin Complex in Charleston, WV, and selected areas within Camp Dawson at Kingwood (Preston County), and to provide a prioritized approach with conceptual costs for redundant water and sewage systems at these locations, and will be altered to accommodate the facility's needs and meet current building codes. ("Project"). These facilities house West Virginia National Guard troops. The facilities will be renovated to support elements of the West Virginia Army National Guard Command.



b. The Dunn Engineers Inc. - Approach to Agency-Specific Concerns

Vulnerability Assessments

Dunn Engineers (DEI) understands the security requirements of having standalone, redundant systems to enhance the protections of the WVARNG at these locations. In the event of security breaches or imminent threat, WVARNG must have a plan for site vulnerabilities. Assessing the vulnerabilities of the existing water and sewer infrastructure is within the capacities of DEI. In the process of assessing the existing systems, along with creating a complete inventory of assets, tagging assets for vulnerability will be done. Just as the State of West Virginia is moving to a requirement for alternate water sources in the event of situations such as occurred with the Elk River contamination as a water source in 2012, the goals and objectives, it is logical and necessary that military facilities also work toward alternative sources that are free from potential contamination affecting their primary source. Other factors will also be addressed in preparing vulnerability assessments for the WVARNG.

Asset Management Inventories

Dunn regularly prepares asset management inventories which include detailed assessments of a utility's assets. Researching plans of existing utilities, water and sewage treatment facilities and collection and distribution lines, is a major factor in finding and identifying assets and is a standard component of every project that we undertake. Using mapping, site visits and inspections, even smoke testing and remote television camera pipeline inspection are all tools that DEI normally uses to compete facility plans of existing systems.

Water Source Protection

Dunn has assisted many utility and municipality clients with establishing or creating source water protection with alternate water sources, some of which have included well sites, different water sheds, and mine sites for those alternate sources. We recently completed such services for the Nettie-Leivasy Public Service District, including well sites and mine sources; we are currently working with the City of Marlinton for alternate ground water sources. Complete water source redundancy has also been accomplished for the Town of Wardensville through the development of a spring and two independent wells.

Redundancy

Creating systems of water and/or wastewater for our clients, either new designs or upgrades for existing facilities and collection/distribution systems, are the major part of our regular work load. Systems that are perfected with a built-in redundancy are common

parts of design and are underway for our clients at Nettie-Leivasy PSD, the City of Marlinton, the Town of Grantsville, the Town of Cedar Grove, and others. If WVARNG's aim is to create a completely separate set of systems that can deliver the same services separate from the existing systems in place, we can accommodate that aim as well. DEI has completed or is working on the following water projects that have two or more independent water sources:

- Nettie-Leivasy PSD Panther Creek, mine, and well
- Town of Cedar Grove Kanawha River, West Virginia American Water Company
- Stonewall Resort Lake, West Virginia American Water Company
- Town of West Hamlin Guyandotte River, Salt Rock Water PSD
- Town of Wardensville Spring, two deep wells
- Lost River State Park Two separate deep wells
- City of Logan Guyandotte River, Logan County PSD

Electrical redundancy is also a standard part of every project that is developed by Dunn Engineers.

Prioritized Approach

A part of that process, for the WVARNG, will be to prioritize the possible upgrades, modifications, and / or new construction that will be provided as alternatives for your selection. Prioritizing based upon needs of existing and /or proposed equipment, lines, and facilities, is a normal part of the process. Factors such as failing equipment, rusted, leaking storage tanks, out-dated, corroded, broken, and/or leaking pipe, end-of-life usefulness of pump stations and package plants, and other disrepairs or failing facilities and equipment all play a role in determining the priority of needs in order to provide safe, healthy continuing utility services. In some cases, we have identified emergency repair needs that take priority over all other recommended activities once we have completed our assessment of the existing systems. Many of our clients, because of the financial burden involved, have projects done in phases over a course of time (often years) in order to fund the work; the result is the need to prioritize the costs and value of each part of the proposed work and then segregate it into phases to accommodate the client's needs and reduce their overall financial burden to reasonable limits. In addition to such normal prioritization of work, we can easily add other factors into the prioritization process, depending upon the expressed needs of the client, in this case, the WVARNG.

Conceptual Costs

A part of the process of proposing alternatives for upgrades or new systems to replace existing systems (or create free-standing, redundant systems), is to include cost estimates of the proposed construction work. In most cases, viable alternatives are

proposed in a Preliminary Engineering Report (PER) and, to better inform the client, costs are lined out as cost estimates for the construction work. We have an outstanding record of final costs coming in under projected bid prices. The conceptual costs are essentially the cost estimates for the various proposed alternatives that we will develop to meet the specific requirements of each WVARNG location.

c. Location Specific: The Joint Forces Headquarters, West Virginia Army National Guard facilities within the Coonskin Complex, at 1703 Coonskin Drive, Charleston, WV 25311

The extent to which the WVARNG HQ (Coonskin Complex) is dependent upon West Virginia American Water for potable water, and to the City of Charleston Sanitary Board for collection and treatment of wastewater, will be examined as part of the assessment of existing facilities. Determining vulnerability of existing systems and services will be part of the assessment process that will also produce an inventory of the complete existing utilities systems for the Coonskin Complex. The process of assessment will result in complete water and wastewater facilities plans and preliminary engineering reports to evaluate alternatives for redundant water and sewage systems to serve the Coonskin Complex. Upon selection of preferred alternatives by the Agency, we will provide all necessary engineering services to design, cost estimate, and oversee construction of appropriate redundant systems for the Complex. Further discussion can be found under the proposed project needs, our statement of qualifications, and specifically addressed under the Agency's listed project and goals.

d. Location Specific: West Virginia Army National Guard facility, Camp Dawson (selected areas), located in Kingwood (Preston County) WV 26537

The extent to which Camp Dawson is dependent upon potable water from the Kingwood Water Works, and to the Kingwood Sanitary Sewer Works for wastewater collection and treatment, will be examined as part of the assessment of existing facilities. Both Kingwood utilities operate from the Municipality of Kingwood, West Virginia. Determining vulnerability of existing systems and services will be part of the assessment process that will also produce an inventory of the complete existing utilities systems for Camp Dawson. The process of assessment will result in complete water and wastewater facilities plans and preliminary engineering reports to evaluate alternatives for redundant water and sewage systems to serve Camp Dawson. Upon selection of preferred alternatives by the Agency, we will provide all necessary engineering services to design, cost estimate, and oversee construction of appropriate redundant systems for the Camp. Further discussion can be found under the proposed project needs, our statement of qualifications, and specifically addressed under the Agency's listed project and goals.

STATEMENT OF QUALIFICATIONS AND PERFORMANCE DATA

INTRODUCTION

Dunn Engineers, Inc. (DEI) is a West Virginia based consulting engineering firm that was established in 1975. Since its formation, our firm has been involved in a wide variety of municipal projects, which have enabled our personnel to obtain the breadth and depth of experience needed to meet and exceed the expectations of our clients. Dunn Engineers, Inc. is ready to provide the West Virginia Army National Guard (WVARNG) with all engineering expertise required for these projects.



Dunn Engineers, Inc. is located directly across the Kanawha River from the West Virginia State Capitol Complex.

Dunn has many years of experience in assessing the needs for an area to receive clean, potable water and right-sized sewage collection & treatment systems and water treatment & distribution systems. Dunn will make assessments and recommendations that are cost-effective and realistic. We will work with the WVARNG to arrive at the best possible plan of action. We are here to serve you with the best practices and most affordable methods available, delivered in a fast, expedient fashion - within budget and on time.

On the following pages, we list past projects successfully completed for similar water and wastewater systems throughout the State of West Virginia. Note that we provide information on the types of projects within those two categories. Separate projects of the types requested are also listed in more detail, including costs and specifications.

DEI Expertise in Wastewater Collection and Treatment

Looking at alternatives for treatment that emphasize a green footprint would bring this facility into environmentally compliant and sound treatment processes. Non-point source discharge technology has allowed Dunn to funnel discharge in an appropriate and ecologically sound manner into the ground rather than into nearby streams, thus preventing unnecessary additional treatments to keep running waters clean.



Dunn Engineers has dealt with many different sized wastewater treatment facilities and recently completed a self-contained package plant facility for the Communities of Helen and Ury, part of the Crab Orchard - MacArthur

Public Service District. Other small package plant facilities which Dunn had recently completed include the Town of Leon, the Pine Meadows Apartments (a private facility in Tornado), Mt. Zion PSD, and the Town of Cairo.

The Ury facility is a small extended aeration package plant (this is a re-circulating sand filter treatment facility), a standalone facility capable of meeting all of the requirements of the PSD's NPDES permit. It consists of a 7,500 gallon aeration basin, with a 2,500 gallon digester, 64 square foot clarifier, and 480 gallon sump / chlorine tank; the sludge is hauled to a separate treatment facility in the PSD for de-watering and disposal. Components of the plant include influent and effluent (dosing pump stations along with force main, a subsurface effluent distribution system, and new collection system. The drip field associated with the package plant has a loading area of 215 feet long by 90 feet wide (18,900 square feet), that is dosed at a rate of 0.13 gallons per square foot per day. The drip field is designed for an average flow of 3,750 gpd and a peak flow of 7,500 gpd.

Dunn Engineers is currently the engineer of record for all of Crab Orchard-MacArthur Public Service District, in Raleigh County, and the Town of Ansted, in Fayette County. We are working with the City of Ronceverte to upgrade their wastewater treatment facility in Greenbrier County, just north of the Lake Moncove area in Monroe County. We are very familiar with the challenges and demands of the terrain.

DEI Expertise in Water Treatment and Distribution

Dunn Engineers is well practiced in providing appropriately sized water treatment facilities, including establishing new water supply / sources for such facilities as needed. We are also experienced in replacing waterlines with pipe and appurtances that will be of sufficient size to provide for all demand expectations and pipe of a quality that will endure for periods of at least eighty years.

Dunn Engineers is currently the engineer of record for a water treatment plant and distribution system rehabilitation project the City of Marlinton and has recently completed a water tank project for the Town of Hillsboro. Dunn provided the engineering work at the Town of Wardensville for their lagoon water treatment and distribution system, and work on their wastewater system as well, in nearby Grant County. Also in Grant County,



Dunn was the consulting engineer for the design of water and wastewater treatment and lines, along with roads and construction supervision of the Grant County Business and Technology Park, under the contract with the Grant County Development Authority. Currently, Dunn Engineers is providing engineering services to the City of Keyser up in Mineral County for both water and wastewater treatment plants and associated lines. Dunn is very familiar with the type of terrain that can be found in throughout West Virginia and will be able to easily design the needed facilities.

OVERVIEW OF STAFFING

Dunn Engineers is staffed with specialists to perform the functions required to meet our clients' current and future needs. We currently have a staff of twenty-three employees, including three registered professional engineers, an engineer intern, five CAD designers, permit technicians, full time resident project representatives and an office staff. This staffing allows Dunn Engineers, Inc. to perform all the Facilities Planning and Preliminary Engineering Report studies, funding analysis, Infiltration / Inflow Analysis or Water / Sewer System Evaluations, detailed design, permitting, bidding and construction inspection, and administrative services required by our clients.

Our typical annual workload includes approximately five Facility Plan Studies, four to six design projects and four to six construction projects. In addition to these wastewater and water projects, our workload will also include one or more industrial park projects.

We very carefully manage our workload to enable us to meet all of the scheduling of our clients and those of the regulatory and funding agencies. Because of this management, Dunn Engineers, Inc. could immediately engage our staff for the WVARNG when selected to work on the JTHQ (Coonskin Complex) and Camp Dawson projects.

Technical Expertise Qualifications

Dunn Engineers, Inc. has the qualifications and technical expertise to perform the required work for these WVARNG projects. Our personnel, with experience ranging from 5 to 37 years, have been involved in many different civil engineering projects. Those people now charged with design and construction management for our firm have served for periods of time as members of survey crews gathering design data and performing construction stakeout, resident project representatives, design technicians and design engineers. Each member has a specific task to perform and does it within a prescribed budget and time schedule. Dunn Engineers believes that a client is a special team member and should be a part of every decision.

This variety of experience has proven extremely valuable in determining project feasibility, preparing accurate cost estimates and advising support personnel at critical stages in the development and construction of projects. Our design engineers and technicians function as a single integrated unit ready to meet the needs of our clients and their project.

The staff at Dunn Engineers, Inc. is fully capable of evaluating and analyzing the base data and information generated prior to design with an eye toward the development of alternative concepts and facilities. Our strong background enables us to quickly analyze problem areas and develop cost-effective solutions.

We have the latest in modern equipment necessary to generate and compile complex engineering data. We are well equipped using our own portable pressure pipe flow meter, open channel flow meters, and pipe location equipment with fully trained staff to operate these units. A well-qualified technical drafting and CAD staff provide the touch of quality in the appearance of our final products. Three of our CAD operators have over twenty (20) years each of drafting and design.

All state and federal agencies have specific project administrative requirements which must be followed. We are well versed in these practices and have in-depth experience in SCBG / HUD / RUS / ARC / EDA programs necessary to assist our client in the preparation of contract documents and detailed specifications.

Resumes of Key Personnel: see Appendix A

KEY STAFF QUALIFICATIONS including experience with similar projects

F. Wayne Hypes, P.E., P.S., President and Chief Engineer of DEI

Wayne Hypes will lead the team for the project. In addition, he is the firm's chief design engineer and project manager. Attends meetings with the Owner, Regional Planning & Development Councils, funding and regulatory agencies, directs field investigations, reviews findings and develops alternatives for evaluation; directs writing of facilities plans, applications; including directs design activities and serves as the project's technical expert for PSC proceedings; directs bidding. construction inspection and construction administration. startup Oversees project and



Mr. Wayne Hypes (left) with staff

closeout. Mr. Wayne Hypes' complete resume is attached at the end of this proposal. Full résumé is found at Appendix A. Experience in similar projects:

CURRENT SIMILAR WATER PROJECTS:

Clay-Roane PSD (Multiple Projects For Waterlines And Water System Extensions);

Town Of Cairo (Waterlines Improvements);

Walton PSD (Water System Improvements)

CURRENT SIMILAR WASTEWATER PROJECTS:

Town of Worthington (Wastewater Treatment Plant upgrades);

Town of Cairo (Sewer Manhole and Pumping Station Replacement);

Town of Oceana (Wastewater Treatment Plant Upgrade);

COMPLETED SIMILAR WATER PROJECTS:

Spring Heights (Water Plant Rehabilitation & Tank Replacement);

Nettie-Leivasy PSD (Summersville Waterline Connection);

Clay Roane PSD (Amma Waterline Extensions; Elkhurst Waterline Extensions);

COMPLETED SIMILAR WASTEWATER PROJECTS:

Dingess Run PSD (Wastewater Collection System);

Town of Worthington (Wastewater Treatment Plant);

Spring Heights (Wastewater Treatment Plant upgrade; DEP Compliance)

Certifications or degrees applicable to these projects

F. Wayne Hypes: President, Chief Project Engineer: over 31 years of experience in planning, design and construction environmental projects. Education: Bachelor of Science, Mining Engineering Technology, West Virginia Institute of Technology, 1982; Associate of Science,; (Surveying), West Virginia Institute of Technology, 1983; Registrations: Registered Professional Engineer; Registered Professional Surveyor; Professional Associations; Water Environment Federation; Association of Consulting Engineers; Rural Water Association

KEY STAFF QUALIFICATIONS including experience with similar projects

Frederick Hypes, MSCE, P.E., P.S., Vice-President of Engineering, DEI

Fred Hypes is vice-president of engineering. Acts as Project Manager and assists other Project Engineers with report writing, facility design and interaction with funding and regulatory agencies. Attends meetings for the project engineer and acts as project engineer when required. Fred worked for the West Virginia Department of Environmental Protection for twenty years; he was the Engineering Section Leader of the Construction Assistance Branch. For the last six years with DEP, Fred was the voting DEP member on the IJDC. As the result, Fred saw and reviewed



Mr. Fred Hypes

every application that came before the IJDC for funding. Fred is the premier application writer in West Virginia. In addition, he has extensive knowledge of all possible funding sources, the decision makers there, and what funding package will work best for each client. Mr. Fred Hypes' complete resume is attached at the end of this proposal. Full résumé is found at Appendix A. Experience in similar projects:

CURRENT SIMILAR WATER PROJECTS:

City Of Benwood (Water Treatment Plant & Distribution System Upgrades);

Sugar Creek PSD (Multiple Waterlines Extensions);

Nettie-Leivasy PSD (Water Tank rehabilitation)

CURRENT SIMILAR WASTEWATER PROJECTS:

Town of Auburn (Sewer System Treatment and Collection);

COMPLETED SIMILAR WATER PROJECTS:

Town of Wardensville (Water Treatment Plant and Waterline Extensions);

City of Benwood (Water Treatment Plant and Distribution System)

COMPLETED SIMILAR WASTEWATER PROJECTS:

Crab Orchard - MacArthur PSD (Town of Ury, Wastewater System);

Town of Leon (Sewer System & Wastewater Treatment Plant);

Braxton County Senior Citizen Center (Sewage Treatment Plant Upgrade);

Town of Wardensville (Sewer System Improvements)

Certifications or degrees applicable to these projects

Frederick L. Hypes: Vice-President of Engineering, Project Engineer: over 36 years' experience in planning, design and construction environmental projects; Former Chief Engineer for the West Virginia Department of Environmental Protection, Construction Assistance Programs for 15 years. Education: Bachelor of Science (Civil Engineering), West Virginia Institute of Technology, 1979; Master of Science (Civil Engineering), West Virginia College of Graduate Studies, 1985; Registrations: Registered Professional Engineer; Registered Professional Surveyor; Professional Associations: Water Environment Federation: National Society of Professional Engineers

KEY STAFF QUALIFICATIONS including experience with similar projects

Eric Hartwell, MSCE, P.E., Engineer, DEI

Eric Hartwell is a specialist in hydraulic engineering. He is a senior design engineer: Performs detailed calculations for water, wastewater and storm water projects. In addition, Eric manages numerous projects through construction and facility startup and also provides assistance to clients on various permitting and regulatory compliance issues. Mr. Eric Hartwell's complete resume is attached at the end of this proposal. Full résumé is found at Appendix A. Experience in similar projects:



Mr. Eric Hartwell

CURRENT SIMILAR WATER PROJECTS:

City of Logan (Water System Upgrades)

CURRENT SIMILAR WASTEWATER PROJECTS:

City of Ronceverte (Wastewater Treatment Plant);

Town of Cedar Grove (Sewer System Rehabilitation)

COMPLETED SIMILAR WATER PROJECTS:

Logan Water Board (Water Treatment Plant);

City of Ronceverte (Potable Water Facility Plan; Water Systems Improvements)

COMPLETED SIMILAR WASTEWATER PROJECTS:

Town of Cedar Grove (Long-Term Control Plan; Sewer System Revitalization)

Certifications or degrees applicable to these projects

Eric T. Hartwell: Project Engineer; over 18 years' experience in planning, design and construction environmental projects. Education: Bachelor of Science, West Virginia Institute of Technology, 1995; Master of Science, West Virginia University, 1997; Registrations: Registered Professional Engineer

PROPOSED STAFFING PLAN

Chief Project Engineer:

F. Wayne Hypes, P.E., P.S.

Will oversee the staff and the project from conception to completion. Will be hands-on with project design, teaming with project engineers.

Project Engineers:

Frederick L. Hypes, P.E., P.S. and Eric T. Hartwell, MSCE, P.S.

Will create any required engineering studies, reports, operations procedures, operation compliance reports, operations full risk assessments: and, Will work with Chief Project Engineer to design project plans and specifications; oversee project to completion, teaming with site resident project representatives (RPRs) for on-site supervision and oversight

Support Staff & Site Resident Project Representatives (RPRs)

RPRs: onsite supervision of construction; Support staff: CADD / Design Department - Engineering Technicians; and, Permitting Specialists

Support Staff & Site Resident Project Representatives (RPRs)

Jessica E. Hypes, Head of CADD / Design Department; Engineering Technician, DEI

Jessie Hypes is the head of the Dunn Engineers CADD / Design Department. She has three draftsmen and a CADD technician working for her department who will focus on the Red Sulphur Public Service District' Strategic Plan. With over 35 years of experience in drafting, and up to date skills utilizing the most current technology, Ms. Hypes and her team will bring skilled workmanship and excellence to the project. Her team includes wastewater and water plant and system designers who work with the project engineer(s) to design treatment plants, collection and distribution systems; and, System Design Specialists who design, along with the calculation engineer, all of the pipelines required for the project. The team develops all construction drawings for the entire project.

Edward G. Garbett, II, Engineering Technician and Permit Specialist, DEI

Ed Garbett is a permit specialist and engineering technician, working with all the various government departments for required permits for construction and rehabilitation projects. Mr. Garbett has eighteen years of experience with Dunn Engineers as a specialist in research, and in acquisition of easements / rights of way. In addition, Mr. Garbett does cost estimates for construction projects. Mr. Garbett is a retired veteran with twenty years of service in the U.S. Army Special Forces and the West Virginia Army National Guard Special Forces.

Current Listing of some of the DEI Resident Project Representatives (RPRs)

Elvis Canterbury, RPR

Pre-Dunn work experience: Building trades and construction contracting for pipelines, road construction, buildings, and cross-country gas lines (35 years); included work on I-64, Bluefield Hospital, Beckley Regional Jail and Federal Jail, and the bridge at Bramwell. Projects for Dunn include City of Keyser, Worthington, City of Logan, Salt Rock, Crab Orchard MacArthur PSD, Oceana, Mason, and Wardensville. Currently working at the City of Ronceverte.

Steve Carnefix, RPR

Pre-Dunn work experience: Construction Industry (35 years, including the construction of buildings, highways, and bridges for 16 years); foreman and supervisor since 1981. Projects for Dunn include Flatwoods Canoe Run, Greater St. Albans PSD, City of Keyser, City of War, Sugar Creek PSD. Currently working at the Greater St. Albans PSD.

Ed Carpenter, RPR

Pre-Dunn work experience: Service in both the US Army and the Coast Guard; Retired Professional Engineer (P.E.) in three states (West Virginia, Ohio, and Mississippi); ISO 900 Auditor; Manager in Construction Engineers (new plant design); project engineer (10 years); Maintenance and Maintenance Manager (15 years). Projects for Dunn include Nettie-Leivasy PSD, St. Albans MUC, Crab Orchard-MacArthur PSD, City of Petersburg, and City of Keyser. Currently working at City of Keyser.

Roscoe Knight, RPR

Pre-Dunn work experience: Service in the National Guard; Flatwoods Canoe Run PSD operator of Water Treatment Plant / Class II License — retired in 2007 with 27 years' experience with waterlines; Projects for Dunn include Sugar Creek PSD and Flatwoods Canoe Run PSD. Currently working at Sugar Creek PSD.

SUB-CONTRACTORS

Although Dunn Engineers normally does all work internally, upon occasion, some specialized work is accomplished by experts in their fields. These sub-contractors have past work experience with Dunn Engineers and are trusted partners:

GEOTECHNICAL & ENVIRONMENTAL ENGINEERING

American Geotech, Inc.

601 Ohio Avenue Charleston, WV 25302

340-4277 Office 340-4278 Fax

Kanti S. Patel, M.S.C.E., P.E., President kpatel@americangeotechinc.com

SURVEYING

New River Engineering, Inc. 202 School Drive Shrewsbury, WV 25015

304-595-3290 Office 304-595-3341 Fax

Chuck Kurzyna Cell: 304-546-4089 ckurzyna@nrei-wv.com

Christopher Burford - Proj. Mgr/Safety Director Cell: 304-550-9525 cburford@nrei-wv.com

REFERENCES (for Dunn Engineers, Inc.)

Barry Milam, General Manager Crab Orchard-MacArthur Public Service District P. O. Drawer 278 Crab Orchard, WV 25827 (304) 252-0604

Honorable John Roach, Mayor Town of Oceana P. O. Box 190 Oceana, WV 24870 (304) 682-5647

Crystal Hayes,
General Manager
Clay-Roane Public Service District
1100 Elkhurst Road
P.O. Box 8
Procious, WV 25164
(304) 548-5209

Kay Ashworth Board of Directors Greater St. Albans Public Service District. 508 4th Street St. Albans, WV 25177 (304) 722-7228

Reba Mohler, City Manager City of Ronceverte 200 West Main Street, City Hall P.O. Box 417 Ronceverte, WV 24970 (304) 647-5455 Sandra Hulsey,
Former Mayor
Current Member of Town Council
Town of Worthington
247 Main Street
Worthington, WV 26591
(304) 816-1773 (cell)

Ms. Carolyn "Kitten" Cempella, Mayor City of War, City Hall 11701 Highway 16 South War, WV 24892 City Hall (304) 875-3111

Mrs. Renae Riffle, Recorder Town of Leon P. O. Box 22 Leon, WV 25123 (304) 812-7381

Honorable Serafino Nolletti, Mayor City of Logan P. O. Box 28 Logan, WV 25601 (304) 752-7870

Kenneth Barton (Former Mayor) Town of Cedar Grove 302 Alexander Street (P.O. Box 536) Cedar Grove, WV 25039 (304) 595-2991

PROCEDURE FOR PROPOSED METHOD OF APPROACH

DUNN ENGINEERS PLAN OF APPROACH

Dunn Engineers, Inc. has been very successful in taking utility projects from conception to completion by utilizing a multi-step procedure that integrates the **owner**, engineer and other professionals. This procedure has been used to guide every project undertaken by our firm.

This plan will entail reviewing current conditions and plans to coordinate and implement the improvement projects needed to provide the requested water and sewer service improvements for the WVARNG for the next several decades.

The steps of our procedure to be used for your overall water and wastewater projects include:

- 1) Preplanning
- 2) Planning / Study
- 3) Design
- 4) Construction

1.) PREPLANNING

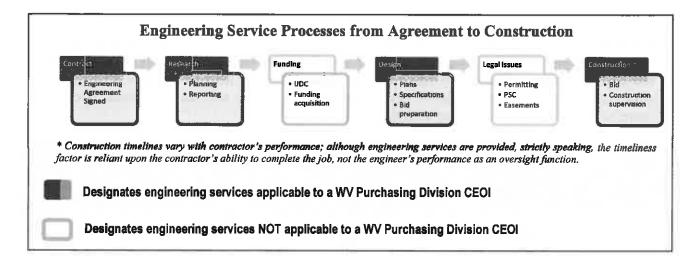
The first and most critical step is to preplan your project. Preplanning will accomplish the following goals:

- Identify project team* establishes team members from WVARNG and Dunn Engineers
- Establish lines of <u>COMMUNICATIONS</u> for duration of project set the methods for ongoing communications by assigning personnel from WVARNG involved and from Dunn to act as liaisons, with email, FAX, and telephonic exchanges plus regularly scheduled on-site meetings for progress assessment, time management and quality control.

*NOTE: This sets up communications procedures between owner and engineer.

- Identify existing studies / reports for WVARNG's water and wastewater project needs
- Review scope of project

These goals will be achieved by meeting with the project team (owner, engineer, and other parties as appropriate), and regulatory agencies as may be needed. Once the scope is established, the project will move into the planning / study phase. Normally, DEI works with utilities in the public sector (county and municipal governments), which involve additional steps in the process of moving from Engineering Agreement to Project Completion; notably, these involve funding acquisition, permitting, easement acquisition, and Public Service Commission approval. In the case of work for the WVARNG, most of these steps will not apply. In order to best express our timeliness record of performance with projects, we are therefore only addressing our performance for the Planning and Reporting, Design, and Construction Supervision stages. To illustrate our explanation of steps of the process for engineering services, here is a diagram:



2.) PLANNING AND STUDY

The second step is to evaluate the problems identified during the preplanning step and develop alternatives for solving them. For the WVARNG this would include:

- Review of existing reports / studies identified in pre-planning step
- Review of existing data, any plans and surveys
- Conduct field research
- Compile all existing data and data collected in field research
- Establish project <u>BUDGET</u> Dunn will prepare cost estimates for the projected projects to meet identified needs for water and wastewater services for the WVARNG. These cost estimates will include not only costs for materials and equipment but also costs for engineering services and any other applicable services or expenses. The final budget will reflect entire budget for the project.

 *NOTE: This sets up budget for the project.
- Set project <u>TIMELINE</u> (schedule)* Dunn Engineers, Inc. (DEI), in coordination with the WVARNG, finalizes the project schedule during the planning stage of the project. This project schedule establishes the timeline for the project. Planning for project timeline (schedule) establishes date for groundbreaking through completion, with benchmarks as appropriate; team oversight is essential and provided onsite by Dunn Engineers' Resident Project Representatives (RPRs). Keeping construction on track and on time requires pre-planning to account for potential hurdles, particularly inclement weather delays and timely delivery of equipment, materials and manpower. Crafting the contract and specifications to account for such hurdles, assists in ensuring timely completion of construction. Regular meetings and/or electronic communications between Engineer and Owner to assist in maintaining timeliness. *NOTE: This sets up timeline for completion of project.

Dunn Engineers' TECHNICAL EXPERTISE IN PREPARING ACCURATE CONSTRUCTION COST ESTIMATES is proven (see Table below showing representative history of projects meeting budget); we have a superlative record of project bids coming in under our cost estimates and have prepared a table to demonstrate a history of projects staying within construction cost proposed budgets. Our estimates are accurate and realistic which allows for more confident financial planning with the WVARNG.

Contract Prices vs. Engineer's Estimates				
CLIENT	ENGINEER'S ESTIMATE	BID PRICE	BID DATE	
City of Ronceverte Wastewater Treatment Plant Upgrade	\$22,369,500	\$19,678,810	May 28, 2015	
City of Logan Midelburg Sewer Separation	\$69,000	\$54,815	December 16, 2014	
Union Williams Public Service District Pleasant Lane Waterline Relocation	\$46,000	\$28,611	November 12, 2014	
City of Keyser Water Treatment Plant Rehab	\$5,500,000	\$4,576,200	June 6, 2013	
City of War Centerville & Shop Branch Wastewater Collection System Extensions	\$1,367,120	\$1,243,680	February 2013	
Town of Worthington Wastewater Treatment Plant Upgrade	\$3,500,000	\$3,268,700	March 2012	
Crab Orchard-MacArthur P.S.D. Wastewater Collection System Ext., Misc. Ext. Phase II and Community of Ury	\$4,094,000	\$3,367,893	May 2011	
Flatwoods-Canoe Run P. S. D. Wastewater System Improvements	\$7,000,000	\$6,631,335	March 2011	

Finalize Facilities Plan incorporating all of the Planning and Study

Once sufficient data is assembled, alternatives for future water and wastewater infrastructure projects are developed, incorporating the existing data and research. The Facilities Plan will incorporate all the assembled data. This will be a living document which will be subject to reassessment to reflect data streams providing updated information on the projects as they are undertaken and / or completed.

3.) DESIGN

Once the specific alternatives for the proposed new water and wastewater infrastructure projects have been determined, the projects will proceed to the design step. As in the Planning and Study step, the WVARNG team will be integrated into the design of the project. Equipment and treatment process selection will be thoroughly discussed with and input obtained from the WVARNG to produce the best, most cost effective project for the JTHQ (Coonskin Complex) and Camp Dawson.

Design services of the engineer: Once the project schedule is set, Dunn is capable producing finished engineering designs and of meeting the schedule in a timely manner; and, in several instances, we have developed project plans and specifications for approval in record time. However, we do not sacrifice quality and accuracy for speed and make certain that this effort is considered when establishing the schedule. Our performance records shows successfully expedited projects, but is keyed closely to all parties responding in a timely manner.

Dunn sets up QUALITY CONTROL review sessions on the project(s); typically, at least two other engineers will review the plans and report findings with the design engineer. This extra effort spent on quality control produces concise cost estimation, and, results in consistently favorable bids from the contracting industry. All cost factors are closely balanced in the planning process to guard against under- or over-sizing systems for the WVARNG projects.

As the design progresses, regular team meetings are held with the WVARNG, to apprise them of project progress and to obtain their input prior to the formal review process. Meetings will also be held with the project team to finalize any permit applications or other regulatory requirements.

At the conclusion of the design step, the project will move to construction.

4.) CONSTRUCTION

For most engineering firms, the final step of the project is construction. Once contractor bids are received and construction begins, coordination between the Owner and the Engineer increases as the projects are being constructed because existing systems must be kept in operation while the new infrastructure system is being constructed and brought on line. Regular meetings are held throughout construction to exchange information and resolve any problems that might develop; our resident project representatives will also be onsite every day and communicating with the WVARNG's operational staffs.

Monitoring the contractor's performance: another key to maintaining project schedule is maintaining an onsite presence; Dunn provides permanent onsite Resident Project Representatives (RPRs) who stay with the contractor's workers and foreman throughout the project, keeping our project engineer in constant contact, and alerting the engineer to any potential delays so that actions may be taken to offset such delays before the schedule is affected in any substantial manner. Regular meetings and communications with the Contractor and the Owner further ensure that everyone adheres to the project schedule. A table displaying samples of DEI's timeliness with projects is shown at this end of this section (see page 7).

Close scrutiny of all contractor shop drawings during the construction phase, with attention to both costs of proposed material alternatives and project schedule; keep the costs from overrunning the original project budget. All budgets, however, have a required contingency amount (a set percentage) which addresses any unexpected costs such as delays due to weather, delivery of material and equipment, or contractor performance. **KEEPING A TIGHT REIN ON COSTS** is part of the service provided by Dunn Engineers.

After construction has been completed, post construction services will begin. These activities will include resolution of warranty issues, assistance with the operation, new equipment and processes. This will continue our on-going relationship with the WVARNG; communications will continue, to satisfy permitting and reporting requirements and to resolve any problems that might develop over time.

CLEAR PROCEDURE FOR COMMUNICATIONS WITH OWNER

- Communications are established at the onset of the project, when the contract for Engineering Services is signed. At that time, a project team is identified, which will include team members from WVARNG (the owner) and Dunn Engineers Inc. and other such parties as may be appropriate.
- A set line of communications is then established for the duration of project and postproject actions as needed. This sets the methods for on-going communications by assigning personnel from the team, from WVARNG involved and from Dunn to act as liaisons, with email, FAX, and telephonic exchanges plus regularly scheduled on-site meetings for progress assessment, time management and quality control.
- Once contractor bids are received and construction begins, coordination between the Owner and the Engineer increases as the projects are being constructed because existing systems must be kept in operation while the new infrastructure system is being constructed and brought on line. Regular meetings are held throughout construction to exchange information and resolve any problems that might develop; our resident project representatives will also be onsite every day and communicating with our engineers and with the WVARNG's operational staffs.
- Communications begin with establishment of the project team and continue through construction and post-construction services. Dunn responds within 24 hours (or sooner) to any communications from the owner, the owner's representatives, and the contractor, and contractor's representatives, and/or other involved parties.
- Keeping within budget and on schedule requires constant, timely communications between all involved parties.

REPRESENTATIVE HISTORY OF PROJECTS' TIMELINESS Engineering Planning & Design Work Performed Within Contractual Time Constraints*

Engineering **Planning** Construction work Design CLIENT and Reports **Total time** Projected / actual schedule 15 months **Town of Leon: Complete Wastewater** 9 months **Projected 12 months** 6 months with aerial **Facility and Collection System** Completed 12 months mapping **PNGI Charles Town Gaming LLC** Done by **Wastewater Treatment Facility** Potesta (Dunn Construction supervised (Provided Engineering Report, Plans and was hired to do by Potesta; (Dunn sub-21 days 21 days Specifications for Potesta & Associates. design as a contracted for design only) subcontractor) Inc.) Crab Orchard-MacArthur P.S.D.: Projected 4 months Wastewater Collection & Treatment 2 months 30 days 3 months Completed 4.5 months System Community of Ury Phase I Projected 3 months Town of Wardensville: Phases 1 & Phases 1 & II Phases 1 & II Completed 2.5 months Water Improvements: new Deep Well. II 6 months 3 months (total) 9 months Phase II Projected 9 new Tank, Waterline Extensions (total) months **Completed 8 months** Union Williams Public Service District: Projected 46 days 2 months 60 days 4 months Pleasant Lane Waterline Relocation Completed 46 days Town of Hillsboro: Projected 96 days 30 days 30 days 2 months Water Storage Tank painting Completed 96 days

^{*}Most projects also involve assistance with fund acquisition which usually prevents moving forward on design work for periods of time.



PNGI Charles Town Gaming LLC - Wastewater Treatment Facility

PROJECT AND GOALS

The project goals and objectives are:

Goal/Objective No. 1: Provide a complete system inventory and vulnerability assessment of the existing infrastructure systems. The intent of this assessment is to document the current condition and operation of the water and wastewater (sewage) systems and to provide guidance for developing a prioritized approach and conceptual costs to provide for redundant water and sewage systems.

While providing an asset management plan, including inventory of all assets, is a normal service of Dunn Engineers, the addition of a vulnerability assessment can be provided as well, as specific as required by the Agency. Inventories normally include asset's name, quantity, unit, consequence of failure, condition, date installed, useful life (years), replacement cost, end of useful life (date), level of urgency (greater than 10 years of useful life expected / between 5 - 10 years of useful life expected; or, less than 5 years of expected useful life), operations and maintenance costs per year, and, in the case of pumps, the date of the last pump replacement / number of pumps replaced. Additional information for each asset can be included if requested.

Goal/Objective No. 2: Catalog and index the existing water and sewer infrastructure. Site assessment will determine needs of well site and infrastructure. Develop the most cost effective and efficient redundant water and sewage systems at each location. Determine sustainable flow rate of proposed well and maximum number of gallons able to be extracted in a 24 hour period without diminishing service from the well.

Creating a useable index / catalog for the assets, as extracted from the prepared inventory, can be accomplished to the Agency's required specifications. As discussed in opening statements, Dunn Engineers Inc. will prepare both a facilities plan (existing facilities and lines) and a Preliminary Engineering Report, which would include alternatives for the specified goal/objective of creating redundant water systems (and wastewater systems if so desired/ required). These alternatives would be fully described and include cost estimates as well as proposed designs. It is always the goal of DEI to design the most efficient, cost-effective facilities; in the process, resolving any existing issues, including water loss (leakage) and inflow & infiltration issues. Flow rates for well sites proposed will be included as a matter of course in our reports and proposed designs; specifics can be provided to the specifications of the Agency.

Goal/Objective No. 3: Assessment must provide, condition of existing facilities, describing present condition, suitability for continued use, adequacy of water supply, existing water source quantity and quality. Health and Safety describe any concerns and include relevant regulations and correspondence from/to Federal and State regulatory agencies. System operation and maintenance describe the concerns and indicate those with the greatest impact, investigate water loss, management adequacy, and inefficient designs. Sanitary sewage system availability, describe the existing sewage system and sewage treatment works, with special reference to their relationship to existing or proposed waterworks structures.

As noted in Goal/Objective No.1, the inventory will provide condition of existing systems (facilities, lines, storage tanks, etc.). In addition, water sources will be identified and evaluated for quantity and quality, all applicable regulations will govern the work product and recommendations. Any concerns / issues that grow out of the assessment process will be described together with proposed solutions, both short and long term; these solutions (designs, equipment, plans, etc.) will include cost estimates, and impacts on the sites, facilities and population affected, with special attention to health and safety at all times.

Goal/Objective No. 4: Provide proposed design and cost estimates for redundant water systems to include: Water treatment, storage, pumping stations, a financial report including annual operation and maintenance costs for proposed redundant systems and a project timeline.

As discussed in opening statements, Dunn Engineers, Inc. will prepare both a facilities plan (existing treatment facilities and lines) and a Preliminary Engineering Report, which will include alternatives for the specified goal/objective of creating redundant water systems (and wastewater systems if so desired/ required). These alternatives would be fully described and include cost estimates as well as proposed designs concepts.

Goal/Objective No. 5: Provide full design services that may include civil, mechanical and electrical disciplines to assist with the design and construction of fully functional facilities within the proposed budget. Develop drawings and specifications for renovating/ updating existing locations for the purpose of advertising and awarding construction contract(s).

This is standard work for Dunn Engineers, Inc. Please note discussion of normal work provisions in our Statement of Qualifications.

Goal/Objective No. 6: Preparation of the definitive design including preparation of all preliminary and final working drawings, specifications, detailed cost estimates, bidding and construction schedules, and assistance in surveying, analyzing and evaluating bids or proposals for construction.

This is standard work for Dunn Engineers, Inc. Please note discussion of normal work provisions in our Statement of Qualifications.

Goal/Objective No. 7: Perform review and approval of samples and/or shop drawings, preparation of change orders and detailed cost estimates, evaluation of supplier's change order proposals and recommendations for negotiation, and preparation of record drawings (reproducible) showing construction work as actually accomplished (as-built drawings). These services also include presiding over the required construction meetings and preparing construction progress and forecast reports.

This is standard work for Dunn Engineers, Inc. Please note discussion of normal work provisions in our Statement of Qualifications. Note the additional factor of DEI's provision of on-site representation with Resident Project Representative (RPR) for all projects.

SAMPLE PAST PROJECTS with SIMILAR PROJECT REQUIREMENTS

WASTEWATER

Location: Community of Ury (Part of

Crab Orchard - MacArthur PSD)

Project Manager: F. Wayne Hypes, P.E.,

P.S., President of Dunn Engineers Contact Information: Barry Milam,

General Manager, Crab Orchard-

MacArthur PSD, P. O. Drawer 278, Crab Orchard, WV 25827; tel. (304) 252-0604

Type of Project: Sanitary Sewer System for Community of Ury

Project Goals / Objectives: Design a new package treatment plant and collection system for the Town, with a projected population of 13 customers.

How Goals / Objectives were met: Designed treatment facility with a duplex influent grinder pumping station, creek crossings, transportation and installation of an existing package treatment plant, chlorination and dechlorination units including effluent tank and pumps, and installation of a subsurface effluent disposal field.

Location: Community of Helen, WV (Part of Crab Orchard - MacArthur PSD)

Project Manager: Frederick L. Hypes,

P.E., P.S., Dunn Engineers

Contact Information: Barry Milam,

General Manager, Crab Orchard-MacArthur PSD, P. O. Drawer 278, Crab Orchard, WV 25827; tel. (304) 252-0604

Type of Project: Sanitary Sewer System for Community of Helen

Project Goals / Objectives: Design and construct a wastewater treatment and collection system for the Community of Helen, with a maximum of 100 customers projected.

How Goals / Objectives were met: The treatment plant and collection system was designed and constructed, consisting of precast concrete basins, including a 20,000 gallon aeration basin; secondary clarifiers with air lift sludge pumps; a chlorination and dechlorination basin; and 5,000 gallon aerated sludge holding tank; sludge is hauled to the PSD's Fitzpatrick plant for dewatering and disposal. Collection system is a gravity sewer system.



Community of Ury Wastewater Treatment Facility (part of Crab Orchard-MacArthur PSD)

Green techniques, technology, and equipment in use at Ury are: Decentralized Sewer Systems; Non-Point Source Discharge Technology; and, Solar Powered Rechargeable Batteries. This project for Dunn involves using solar panels to power solar-rechargeable batteries to send radio waves to run telemetry systems. This has allowed remote placements without cutting swaths through forests and over mountains, and without acquiring multiple rights of way for power lines in order to run the remote sites. Non-point source discharge technology has allowed Dunn to funnel discharge in an appropriate and ecologically sound manner into the ground rather than into nearby streams, thus preventing unnecessary additional treatments to keep running waters clean. Construction complete. Cost: \$661,000.00

Location: Town of Leon, WV

Project Manager: Frederick L. Hypes, P.E., P.S., Dunn Engineers

Contact Information: Mrs. Renae Riffle, Recorder, Town of Leon, P. O. Box 22, Leon, WV

25123; tel. (304) 812-7381

Type of Project: Wastewater Treatment Facility and Collection System for the Town

Project Goals / Objectives: Design and construct a wastewater collection and treatment system to remedy the water pollution and health hazards in the Town of Leon, the community of Brownsville, and the Leon-Baden Road area.

How Goals / Objectives were met: The designed and constructed treatment facility and collection system consists of a 30,000 gpd extended aeration package plant; 16 - simplex Environment One grinder pumps; a duplex Environment One grinder pump station; a triplex Environment One grinder pump station (surge basin); three duplex submersible pump stations; 13,435 LF of 8" gravity sewers; 6,150 LF of 6" gravity sewers; 132 manholes and cleanouts; 1,600 LF of 4" force main; 4,000 LF of 2" force main; 6,000 LF of 1-1/2" force main; 151 wyes; two directionally-drilled creek crossings; and a gravity creek crossing.

Location: Pine Meadows Apartment Complex (Privately Owned)

Project Manager: Eric T. Hartwell, MSCE, P.E., Dunn Engineers

Contact Information: Ms. Jennie Curry, Vice President, Pine Meadows Limited Partnership (Encore Management Company, Inc.); 2010 Quarrier Street, Charleston, West Virginia 2531; tel. 304-343-3535

Type of Project: Pine Meadows wastewater treatment plant in Lincoln County, WV

Project Goals / Objectives: Make improvements to existing facility and collection system.

How Goals / Objectives were met: Examined existing collection system to determine the condition of the sewer lines and to identify any infiltration or inflow; design to correct problems at the wastewater treatment facility, design included improvements as follows: a new equalization tank at the head of the plant, new bar screen, diffusers and air piping, replacement of dosing pumps, a waste sludge pumping system for wasting sludge, rehabilitation of sand filters including removal of existing sand media, washing media, lining basins, repair and/or replace existing filter under drain.

WATER

Location: Town of Wardensville, WV

Project Manager: F. Wayne Hypes, P.E., P.S., Dunn Engineers

Contact Information: Amanda Barney, Operator, Town of Wardensville, PO Box 7,

Wardensville, WV 26851; tel. (304) 874-3950 (Town Hall)

Type of Project: Water Distribution Lines Extension, upgrade existing spring, new Deep Well, Water Storage Tank Upgrade; and, Telemetry improvements

Project Goals / Objectives: Improve old water distribution and storage system and find new water source.

How Goals / Objectives were met: Upgraded existing water treatment plant, added new telemetry and system improvements; provided a new deep well, upgraded storage tank, and added 1 mile water main.

Location: Sugar Creek PSD, WV

Project Manager: Frederick L. Hypes, P.E., P.S., Dunn Engineers

Contact Information: Mr. James Williams, General Manager, Sugar Creek Public Service

District, P.O. Box 427, Frametown, WV 26623; tel. (304) 364-8619

Type of Project: Improvements to water storage tanks; water treatment plant upgrade and water distribution lines extensions.

Project Goals / Objectives: Design and oversee construction for improvements to water treatment, storage, and distribution system.

How Goals / Objectives were met: Designed one new storage tank; oversaw construction of new tank and repainting of six existing tanks; designed improvements to plant and distribution system including repair / replacement of existing lines and construction of new line extensions.

Location: City of War, WV

Project Manager: Frederick L. Hypes, P.E., P.S., Dunn Engineers

Contact Information: Ms. Carolyn "Kitten" Cempella, Mayor, City of War, City Hall,

11701 Highway 16 South, War, WV 24892; City Hall (304) 875-3111

Type of Project: New waterline extension and repairs to existing water treatment facility

Project Goals / Objectives: Extended sewer service to 60 new customers in Shop Branch Hollow and Centerville areas just outside of War.

How Goals / Objectives were met: Facilities planning, design, construction services were provided; Also obtained repair parts and replacement equipment for wastewater treatment plant. Project included one duplex Pump Station 3 hp Duplex Flygt grinder; one simplex 1 hp grinder Pump Station; 10,000 Linear Feet of 6" and 8" gravity lines; and 1400 Linear Feet of 1 1/2" force main. Major transformation of neighborhoods that had previously used 'straight pipes' for sewage 'disposal.'



DUNN ENGINEERS, INC.

400 SOUTH RUFFNER ROAD CHARLESTON, WV 25156

TEL 304-342-3436

FAX 304-342-7823

EMAIL: dunneng@aol.com

WEBSITE: www.dunnengineers.com

The content of this proposal is the intellectual property of Dunn Engineers, Inc. and, aside from use by the State of West Virginia, no part of its contents may be utilized, copied or reproduced without the written consent of Dunn Engineers, Inc.

© DUNN ENGINEERS. INC. 2015

APPENDIX A [ATTACHMENT A]

President, Dunn Engineers, Inc.

Education

Bachelor of Science,

Mining Engineering Technology, West Virginia Institute of Technology, 1982

Associate of Science, (Surveying), West Virginia Institute of Technology, 1983

Registrations

Registered Professional Engineer Registered Professional Surveyor

Professional Associations

Water Environment Federation
Association of Consulting
Engineers
Rural Water Association

Highlights of Qualifications

Over 30 years of experience in planning, design and construction environmental projects.

Mr. Hypes began his career in 1983 with Dunn Engineers, Inc. and left in 1987 to expand his experience and gain professional growth. He rejoined the Dunn Team in 1995 as Vice President of Operations. He assumed the position of President and Owner in 2000 after the retirement of the founder, Mr. Joseph F. Dunn. Mr. Hypes brings a "high energy," "hands-on" approach to management and a team approach to projects.

Mr. Hypes is an experienced Civil Engineer with a strong background in the planning, design and construction management of wastewater treatment systems, potable water treatment and distribution systems, site development, and solid waste disposal systems. His wastewater experience includes the design and construction inspection of twenty (20) wastewater treatment facilities ranging in size from 0.06 MGD to 21 MGD. He also has experience in the

design and construction inspection of numerous water and wastewater distribution and collection systems. He is experienced in potable water treatment including eight treatment facilities. He has also prepared numerous engineering reports, prepared funding applications for various government agencies, developed rate studies for many water / wastewater districts and provided expert testimony for many Public Service Commission issues. Mr. Hypes also has knowledge and experience in control and topographic surveys.

Mr. Hypes also has three (3) years' experience as an applications engineer selling and maintaining water / wastewater treatment and pumping equipment. He has very detailed knowledge of the inside workings and maintenance for all types water / wastewater treatment and pumping equipment. As part of his duties, Mr. Hypes served as a process troubleshooter where he identified equipment or process problems and made or recommended corrective actions to be taken.

Mr. Hypes has conducted numerous seminars on process design, equipment applications and maintenance.

Representative projects in which Mr. F. Wayne Hypes has been involved include:

Wastewater

Planning, Design and / or Construction Administration of:

- Design of 2.4 MGD SBR Advanced Treatment Plant City of Keyser
- Design of 2 MGD Vertical Loop Reactor advanced treatment plant City of Ronceverte
- Award winning 4 MGD reactor type treatment facility St. Albans Municipal Utility Commission
- 0.5 MGD reactor type treatment facility Town of Oceana
- 2.0 MGD reactor type treatment facility Crab Orchard-MacArthur Public Service District
- 2.5 MGD reactor type treatment facility Salt Rock Sewer Public Service District
- Plans, specifications and construction administration for 0.3 MGD Draft Tube Oxidation Ditch for the City of Paden City, West Virginia
- Plans and specifications for a 0.06 MGD wastewater treatment facility, ½ mile of gravity interceptor and three (3) pumping stations. The treatment facility utilized a sequencing batch reactor City of Pratt, West Virginia
- Plans and specifications for a new 0.5 MGD wastewater treatment facility and pumping station upgrade. The treatment facility utilized an oxidation ditch with an interchannel clarifier City of Sistersville, West Virginia
- Plans, specifications and construction management for a 0.5 MGD oxidation ditch with interchannel clarifier wastewater plant Town of Marmet, West Virginia
- Plans and specifications for a 0.15 MGD wastewater-aerated lagoon and over nine (9) miles of small diameter gravity collection lines Southern Jackson County Public Service District West Virginia
- Plans and specifications for a 0.5 MGD sequencing batch reactor wastewater treatment facility City of Fayetteville, West Virginia.
- 20 miles of gravity collectors and pump stations Town of Oceana
- 10 miles of gravity collectors and pump stations Salt Rock Sewer Public Service District
- Plans and specifications for the upgrade of nine (9) major sewage pumping stations which included one station with a 21 MGD capacity City of Charleston, West Virginia

Representative projects in which Mr. F. Wayne Hypes has been involved include:

Potable Water

Planning, Design and/or Construction Administration of:

- 2 MGD gravity filter treatment facility City of Glenville
- 1 MGD gravity filter treatment facility 750,000 gallon storage tank and distribution lines - Town of Oceana
- Plans and specifications for a 200 GPM pressure filter potable water treatment facility, upgrade of wells, an 80,000 gallon storage tank, and over 200 customer service connections Spruce Fork Public Service District, Boone County, West Virginia
- Plans and specifications for over ten (10) miles of water line extension which included over 300 service connections and two (2) hydropneumatic booster pumping stations Elk Two Mile Public Service District Kanawha County, West Virginia
- 750,000 gallon storage tank and 5 miles of waterline Gilmer County Public Service District
- Countywide Water Studies, Boone, Grant and Raleigh Counties in West Virginia. The studies included the development of all potential service extensions, cost estimates, proposed rates and a priority listing of all projects. Also included in the study were the mapping of all existing systems, listing of facilities, rates, staff and water district boundaries
- Plans and specifications for over eight (8) miles of water line extension and over 250 customer connections Guthrie Public Service District, Kanawha County, West Virginia
- 3 MGD gravity filter treatment facility and 1.5 million gallon storage tank City of Petersburg

Miscellaneous

- Plans and permit for closure of the Montgomery Solid Waste Authority's sanitary landfill Montgomery, West Virginia
- Plans and specifications for the development of a ten (10) acre industrial development park Jackson County, West Virginia
- Field design and implementation of emergency measures to restore potable water and wastewater service to residents during a major flood. Cities of Parsons and Petersburg, West Virginia

Vice President of Engineering

Education

Bachelor of Science,

(Civil Engineering), West Virginia Institute of Technology, 1979

Master of Science,

(Civil Engineering), West Virginia College of Graduate Studies, 1985

Registrations

Registered Professional Engineer Registered Professional Surveyor

Professional Associations

Water Environment Federation National Society of Professional Engineers

Highlights of Qualifications

Over 34 years' experience in planning, design and construction environmental projects

Former Chief Engineer for the West Virginia Department of Environmental Protection, Construction Assistance Programs for 15 years

Mr. Hypes has prepared the following Facilities Plans and Preliminary Engineering Reports, among others, since joining the Dunn Engineers, Inc. staff:

- Flatwoods-Canoe Run PSD wastewater treatment plant and pumping station upgrade, sewer separation, and sewer system extension.
- Flatwoods-Canoe Run PSD water storage and distribution system extension and upgrade.
- Flatwoods-Canoe Run PSD Pine Street, Skidmore Run, Forest Products Road sewer system extensions (three separate projects for the Governor's Community Partnership Grant program).
- Flatwoods-Canoe Run PSD Little Birch River and Herold Route water line extensions.
- Crab Orchard-MacArthur PSD Marsh Fork Sewer System Extension and Upgrade; extend sewers to 2,500 new customers, upgrade the existing plant and construct one new plant.
- Crab Orchard-MacArthur PSD Miscellaneous Sewer Extensions.
- Crab Orchard-MacArthur PSD Community of Helen sewage treatment plant and collection system.
- Arbuckle PSD wastewater treatment plant improvements.
- City of Petersburg water treatment and storage facilities upgrade.
- Town of Leon sewage treatment plant and collection system.

Mr. Frederick L. Hypes has been the engineer in charge of the following design projects:

- Village of Barboursville 1.0 MGD aerated lagoon wastewater treatment plant upgrade and sewer line extension (self-help project).
- Lakin Correctional Facility 0.05 MGD aerated lagoon wastewater treatment facility upgrade.
- Crab Orchard-MacArthur PSD 2.0 MGD wastewater treatment plant and pumping facility upgrade.
- Flatwoods-Canoe Run PSD sewer line extension projects (Skidmore Run, Pine Street, Forest Products Road).
- Pressley Ridge Schools land development project (water, sewer, roads and site work).
- Flatwoods-Canoe Run PSD 200,000 L.F. water line extension and water storage tank upgrade.
- City of Petersburg water plant intake structure.
- South Putnam PSD North Putnam wastewater treatment plant and sewer system upgrade.
- Town of Wardensville water system upgrade.
- Stonewall Jackson Resort water and sewer systems upgrades

Mr. Hypes was involved in the following projects as expert witness-forensic engineering:

- Town of Buffalo stormwater collection system (litigation).
- Snowshoe Water and Sewer, Inc. (representing private clients in Public Service Commission proceeding).
- Greater Harrison Public Service District (PSC certificate case).
- Central Hampshire PSD vs. Cerrone Associates, Inc. (litigation).
- Ferri Contracting, Inc. vs. Cerrone Associates, Inc. (litigation).
- DMK vs. First Community Bank (litigation).
- Corporate Book Resources, Inc. vs. Town of Sutton (litigation).
- Cunningham et al. vs. Union Williams PSD (litigation)

OTHER WORK EXPERIENCE - Mr. Frederick L. Hypes

West Virginia Department Of Environmental Protection (WV DEP):

WV DEP Engineering Section Leader - Construction Assistance Programs

Mr. Hypes was WV DEP Chief Engineer for the Construction Assistance Programs for 15 years, and before that was WV DEP Project Engineer for six years. His duties during those 21 years included:

- Supervised 10 staff engineers, administering over 100 EPA Construction Grant Program wastewater projects and another 100 State Revolving Fund wastewater projects. Duties included final review of facilities plans, plans, specifications, and design reports, operation and maintenance manuals, CSO plans, and erosion control plans. Duties also included construction inspections and consultations with the DEP's Office of Environmental Enforcement.
- Served as Chief Sanitary Engineer for the West Virginia Infrastructure and Jobs Development Council from 1994 to 2000.
- Served as Professional Engineering Adviser to the DEP's Office of Environmental Enforcement and West Virginia Development Office.
- Administered the Combined Sewer Overflow program and Pollution Prevention Program for the Division of Water Resources.
- Represented the West Virginia Department of Environmental Protection on various committees and work groups sponsored by the West Virginia Infrastructure and Jobs Development Council, West Virginia Contractors Association, West Virginia Rural Water Association, West Virginia Water Environment Association, and the Rural Utilities Service.
- Provided expert testimony for the DEP before the Public Service Commission of West Virginia and in state and federal courts.
- Served as Innovative/Alternative Coordinator, evaluating and trouble-shooting alternative collection systems (low pressure grinder pump, vacuum, variable gradient sewers) and innovative treatment technologies (captor, SBR's, interchannel clarifiers, ultraviolet disinfection, constructed wetlands).

Education

Project Engineer Highlights of Qualifications

Bachelor of Science, West Virginia Institute of Technology, 1995

Over 16 years' experience in planning, design and construction environmental projects

Master of Science, West Virginia University, 1997

Mr. Hartwell has a master's degree with a strong emphasis in environmental engineering. He has a background in the design and construction of wastewater treatment and collection systems, potable water treatment and distribution systems, and industrial oil-water separation systems.

Registrations

Registered Professional Engineer

Mr. Hartwell was an integral part of the design team for three municipal wastewater treatment plants and over 60

pumping stations ranging in size from 5 gpm to 5,000 gpm. He has also been involved with the design and construction of three potable water treatment plants. He is experienced in preparing the necessary permits for the design, operation and construction of water and wastewater treatment systems.

Representative projects in which Mr. Hartwell has been involved include:

- Design of 2 MGD Vertical Loop Reactor Advanced Treatment Plant City of Ronceverte
- Design of 2.4 MGD SBR Advanced Treatment Plant City of Keyser
- Plans and specifications for a new water treatment plant for the Logan County Public Service District.
- Plans and specifications for over 20 miles of water line extensions located in Cabell County for the West Virginia-American Water Company.
- Plans and specifications for approximately 10 miles of water line located in Kanawha County for the West Virginia-American Water Company.
- Plans and specifications for a 0.65 MGD wastewater treatment facility and pumping stations for the City of Glenville, West Virginia. The treatment facility utilizes sequencing batch reactors and an ultraviolet disinfection system.

Representative projects in which Mr. Hartwell has been involved include:

- Plans and specifications for a 2.0 MGD wastewater treatment plant for the Crab Orchard-MacArthur Public Service District located near Beckley, West Virginia. The treatment facility utilizes sequencing batch reactors with aerobic digester and ultraviolet disinfection.
- Plans and specifications for a 400 gpm potable water plant for the Town of Mason, West Virginia. The plant utilizes a new 400 gpm water well and chemical dosing system.
- Plans and specifications for a potable surface water treatment plant for the City of Glenville, West Virginia, which utilizes flocculation basins and sand filters for treatment.
- Plans and specifications for an industrial wastewater treatment system for a natural gas compressor station. The plant utilizes an oil-water separator, pumping system, and three manifolded wastewater storage tanks.
- Plans and specifications for an industrial wastewater treatment system serving a natural gas compressor station in West Virginia. The treatment system utilizes a chemical addition system and three pressurized sand filters.
- Plans and specifications for storm and sanitary sewers for the Town of Cedar Grove, West Virginia.
- Plans and specifications for a 2400 gpm water treatment plant for Petersburg, West Virginia, which utilities flocculating clarifiers and sand filters for treatment.
- Plans and specifications for a 2.5 MGD wastewater treatment plant for Salt Rock Sewer Public Service District which utilizes two SBR treatment units, headworks, belt press and UV disinfection unit.
- Plans and specifications for 17 pumping stations for the Salt Rock Sewer Public Service District's wastewater extension project.

APPENDIX B [ATTACHMENT B]

	(Name, Title)
	(Printed Name and Title)
	(Address)
	(Phone Number) / (Fax Number)
	(email address)
offer produ that p condi	uirements, terms and conditions, and other information contained herein; that this bid, if proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the tor service proposed meets the mandatory requirements contained in the Solicitation for oduct or service, unless otherwise stated herein; that the Vendor accepts the terms and one contained in the Solicitation, unless otherwise stated herein; that I am submitting this service of proposal for review and consideration; that I am submitting this
offer produthat p condition bid, o and su I am a	r proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the tor service proposed meets the mandatory requirements contained in the Solicitation for educt or service, unless otherwise stated herein; that the Vendor accepts the terms and one contained in the Solicitation, unless otherwise stated herein; that I am submitting this fer or proposal for review and consideration; that I am authorized by the vendor to execute emit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that thorized to bind the vendor in a contractual relationship; and that to the best of my dge, the vendor has properly registered with any State agency that may require tion.
offer produ that p condibid, o and su I am a knowl registr	r proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the tor service proposed meets the mandatory requirements contained in the Solicitation for educt or service, unless otherwise stated herein; that the Vendor accepts the terms and one contained in the Solicitation, unless otherwise stated herein; that I am submitting this fer or proposal for review and consideration; that I am authorized by the vendor to execute emit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that thorized to bind the vendor in a contractual relationship; and that to the best of my dge, the vendor has properly registered with any State agency that may require tion.
offer produ that p condition of the cond	r proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the tor service proposed meets the mandatory requirements contained in the Solicitation for oduct or service, unless otherwise stated herein; that the Vendor accepts the terms and one contained in the Solicitation, unless otherwise stated herein; that I am submitting this fer or proposal for review and consideration; that I am authorized by the vendor to execute omit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that thorized to bind the vendor in a contractual relationship; and that to the best of my dge, the vendor has properly registered with any State agency that may require tion.

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received: (Check the box next to each addended)	łum received)
Addendum No. 1 Addendum No. 2 Addendum No. 3 Addendum No. 4 Addendum No. 5	Addendum No. 6 Addendum No. 7 Addendum No. 8 Addendum No. 9 Addendum No. 10 the receipt of addenda may be cause for rejection of this bid.
I further understand that any verbal discussion held between Vendor's re	representation made or assumed to be made during any oral epresentatives and any state personnel is not binding. Only d added to the specifications by an official addendum is
Company	
Authorized Signature	· · · · · · · · · · · · · · · · · · ·
Date	
NOTE: This addendum acknowledge document processing.	ement should be submitted with the bid to expedite

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.
(Name, Title) F. WAYNE HYPES, P.E., P.S., PRESIDENT (Printed Name and Title)
Dun Engineers, Inc. 400 South Ruffner Rd. Charleston, WV 253
(304) 342-3436 FAX: (304) 342-7823 (Phone Number) / (Fax Number)
(email address)
CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.
Dunn Engineers, luc.
(Company)
(Authorized Signature) (Representative Name, Title)
F. Wayne Hypes, President (Printed Name and Title of Authorized Representative)
(Date) (Date)
(304) 342-3436 / FAX: (304) 342-7823
(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

	•
Addendum Numbers Received:	
(Check the box next to each addendu	m received)
Addendum No. 1 Addendum No. 2 Addendum No. 3 Addendum No. 4	☐ Addendum No. 6 ☐ Addendum No. 7 ☐ Addendum No. 8 ☐ Addendum No. 9
Addendum No. 5	Addendum No. 10
I further understand that any verbal rediscussion held between Vendor's rep	e receipt of addenda may be cause for rejection of this bid epresentation made or assumed to be made during any oral presentatives and any state personnel is not binding. Only added to the specifications by an official addendum is
Dunn Enginee	rs Inc.
Company 1	11/2
Authorized Signature	
3/29/11	
Date	

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

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.

Authorized Signature: Date: State of West Virginia County of Kanawha to-wit: Taken, subscribed, and sworn to before me this Aday of August 2016. My Commission expires November 13 2020. AFFIX SEAL HERE NOTARY PUBLIC Soundar & January 1.

NOTARY PUBLIC OFFICIAL SEAL DORINDA J. TAYLOR State of West Virginia My Comm. Expires Nov 13, 2020 Dunn Engineers Inc 400 S Ruffner Rd Charleston WV 25314

WITNESS THE FOLLOWING SIGNATURE:

Purchasing Affidavit (Revised 08/01/2015)