

APPENDIX B

CONTRACT SPECIFICATIONS FOR

ITEM 614893

ARTESIAN WATER MAIN AND ACCESSORIES

STATE CONTRACT T200911308

US 301, SR 896 TO SR 1

NEW CASTLE COUNTY, DELAWARE

NOT FOR BIDDING
AUGUST 2015

INSTRUCTION TO BIDDERS

Water main relocations are part of the Delaware Department of Transportation Contract T200911308, US301, SR 896 to SR 1. Only approved Artesian Water Company (AWC) contractors will be authorized to perform water relocation activities. A list of approved AWC contractors is included in this Appendix B.

1. Description of Project:

- 1.1 Install approximately 1700' of 12" DIP, 500' of 16" HDPE DR-11 via Directional Drill and all necessary appurtenances and restoration.
- 1.2 The Contractor shall provide a fusion technician certified by ISCO Industries and shall provide data logger reports for any fusion associated with the horizontal directional drill. The Contractor shall supply labor and equipment to assist the fusion technician during the fusion process.
- 1.3 Electrofusion couplings will not be permitted. The Contractor must coordinate with the fusion technician and allow for the fusion machine to be lowered into the trench for the transition from HDPE to DIP.

2. Defined Terms:

- 2.1 The term "Successful Bidder" or "Contractor" means the approved AWC contractor to whom Delaware Department of Transportation's awarded contractor for State Contract T200911308, US301, SR 896 to SR 1 makes an agreement as a subcontractor.

3. Bidding Procedures:

- 3.1 Complete sets of Bidding Documents may be obtained from the Delaware Department of Transportation's Contract Administration Department in accordance with their procedures.
- 3.2 Contractor shall bid water relocation work in accordance with all Delaware Department of Transportation project bidding procedures including but not limited to: Examination of Contract Site, Interpretation and Addenda, Contract Time and Schedule, Liquidated Damages, Bid Forms, Submission Procedures, Opening of Bids, Awarding of Contract, Insurance Requirements, Payments to Contractor(s) and Modifications or Withdrawal of Bids.

SECTION 1: SPECIAL PROVISIONS

1. General

These Special Provisions are hereby made a part of the contract. In case of conflict with other portions of the specifications, these Special Provisions shall govern.

2. Work to be Done:

- (a) The work to be done under this contract is as described and indicated by the construction plans, utility statement and specifications.

- (b) The plans and specifications are intended to cover the complete project. It should be distinctly understood that failure to mention specifically any work which would naturally be required to complete the project shall not relieve the contractor of his responsibility to perform such work.
- (c) Install and construct all water mains, services, appurtenances and related facilities in accordance with the specifications, locations, recommendations and approval of Artesian, free from defect as a result of Contractor's installation for a period of three years from date of completion and acceptance of the work by Artesian and DeIDOT. Should installation and restoration defects occur within such period of time, all such defects shall be corrected at Contractor's sole expense.
- (d) Inform Artesian and DeIDOT of any abnormalities encountered during the course of Contractor's work, prior to proceeding.
- (e) Conduct pressure tests on water facilities in accordance with the standard requirements and specifications of Artesian, and the material manufacturer's specifications.
- (f) Return any unused material furnished by Artesian to Artesian's Newark yard, and/or pick up from Artesian's Newark yard any additional material required to complete the installation. Any unused material must be returned in the condition that it was received. Dirty, wet, degraded or damaged material will not be accepted and shall be replaced at the Contractor's expense.

3. Field Office & Staging Facilities for the Contractor:

- (a) The Contractor may furnish if he desires, at his own expense, adequate field office facilities for his own use during the prosecution of his work. The location and procurement of these facilities shall be the sole responsibility of the Contractor. The facilities include land, staging areas, electric power, telephone service, sanitary facilities, and water supply. Prior to the delivery of materials to the work site, the Contractor shall have an adequate storage area prepared for staging to the work.

4. Underground Facilities:

- (a) Underground utilities are shown with the best available information, however, their exact locations are not guaranteed. The Contractor shall test pit underground utilities in the vicinity of proposed excavations to determine their exact location. This work shall be performed well in advance of proposed underground work and all interferences shall immediately be brought to the attention of Artesian and the DeIDOT Engineer. All areas disturbed as a result of the Contractor's test pitting and underground utility work shall be resorted to a condition equal or better to that prior to work. The cost of all test pits and their restoration shall be considered to be included in the Lump Sum Bid Price in the Bid Proposal Form.

5. System Operation:

- (a) No valve or other control on the existing system shall be operated for any purpose by the Contractor. The proper Artesian Water Company forces will operate all existing system devices during Artesian's normal business hours.
- (b) The new installations are to connect to the existing system with one tapping sleeve and valve and bends at other locations as shown on the plans. System outages to connect the new installations to the existing system with bends shall be limited to the hours of 10 PM to 4 AM beginning on Monday to Thursday. The Contractor shall submit a written sequence of work, receive approval from Artesian and DeDOT and provide evidence that he has all necessary equipment, materials and labor on site to complete the connections within this time frame prior to the existing system being shut off. The Contractor shall provide Artesian a minimum five working day advance notice of when these connections are to be made so that Artesian can provide notice to their customers.

6. Allowable Working Hours:

- (a) Working hours are to be determined in accordance with the Contract Documents. When an AWC representative is required to inspect work being performed, that work shall only be performed during Artesian's normal business hours unless otherwise indicated in the Contract Documents.

SECTION 2: EARTHWORK

1. General:

- (a) All excavation under this contract will be unclassified and shall include all material required to be excavated, whether dry or wet, earth or rock, part-earth or part-rock, or whatever the character or conditions of the site.
- (b) The Contractor shall excavate, protect and refill all excavations and dispose of excess or unsuitable excavated material that may be necessary for constructing the water mains and all related work, as indicated on the construction plans and specified herein. Excavations shall, in general, be excavated and refilled, either by machinery or by hand, as the Contractor may elect, provided, however, that Artesian and DeDOT shall be empowered wherever it shall decide that such necessity exists, to direct that hand excavation shall be employed; and provided further that refilling by hand shall be done to the extent hereinafter specified. The Contractor shall have no claim for extra compensation due to the fact that hand, instead of machine, excavation may be required at any location where necessary from any cause whatsoever.
- (c) The Contractor shall keep all excavations free from water or other liquids during the progress of the work. He shall provide and keep in operation such pumps, drains, dams, ditching, etc., as may be necessary to keep the excavations dry and free from water or other liquids. Dewatering operations for all utility excavations shall be capable of maintaining dry working conditions with no risk of pavement loss or collapse of any property due to excessive water and trench instability. When such conditions do arise during utility construction, the Contractor shall cease excavation and take action to stabilize the utility trench. Artesian's inspector may require well points to be installed before excavation may proceed. The Contractor is responsible for licensing and pumping permits associated with the well-point or any other dewatering. Include the costs for dewatering and permitting in the bid. Sediment laden dewatering discharge shall be directed to a

approved sediment trapping device such as dewatering basin sediment trap, or sediment basin, prior to release to swales, ditches, storm drain system, streams or surface water bodies of any type. Costs for construction, maintenance and restoration of the sediment trapping device shall be included in the lump sum bid.

2. Trench Excavation:

- (a) Trenches shall be excavated to the necessary width and depths as shown on the construction plans, or as directed. For all pipelines, the width of the trench at all points below the top of the pipe shall not be greater than shown on the Details Sheet for the appropriate pipe size.
- (b) The sides of the trenches shall be practically plumb as possible. They will not be permitted to be sloped except with the approval of Artesian's inspector.
- (c) Trenches shall be excavated so as to provide a uniform and continuous bearing and support for the pipe or other structure on solid ground and at the specified grade at every point between pipe lengths. Any part of the bottom of the trench which may be excavated below the specified grade shall be corrected with approved materials and thoroughly compacted. All water main shall have a minimum 42 inches of cover over the top of the pipe, unless otherwise shown on the plans.
- (d) No greater length of trench in any location shall be left open, in advance of the completed structure placed therein, than shall be authorized or directed. Artesian's inspector shall be empowered, at any time, to require the backfilling of open trenches over completed pipeline, if, in his judgment, such action is necessary, and the Contractor shall thereby have no claim for extra compensation even though to accomplish this backfilling, he is compelled temporarily to stop excavating or other work at any place. If work is stopped on any trench, for any reasons except by order of Artesian, and the excavation is left open for an unreasonable length of time in advance of construction, the Contractor shall, if so directed, backfill such trench at his own cost, and shall not again open this trench until he is ready to complete the laying of pipe therein.

3. Bracing or Sheeting:

- (a) The Contractor shall support the sides and ends of all excavations wherever necessary with braces, sheeting, shore or stringers of appropriate quality and character. All bracing and sheeting shall be put in place or driven by workers skilled in such work and shall be so arranged that it may be withdrawn as refilling proceeds without injury to the pipes built under the contract or to any road bed or adjacent pipes or property.
- (b) All bracing and sheeting in excavations shall be withdrawn as the refilling is being done, except where and to such extent Artesian shall order in writing that said bracing and sheeting be left in place or where Artesian and DeIDOT shall permit the same to be left in place at the Contractor's expense and upon his request.
- (c) The Contractor shall cut off, 18 inches below the surface, any bracing and sheeting ordered or permitted to be left in place, and shall remove and properly dispose the material cut off without compensation therefore.

- (d) Wherever necessary or directed in quicksand or soft ground for the protection of any structure or property, sheeting shall be driven, without extra compensation, to such a depth below the bottom of the excavation as may be required or directed.

4. Backfilling Pipe Trenches:

- (a) Select material for backfilling around and over pipelines shall meet the requirements of the Delaware Standard Specifications for Borrow, Type C. Stone dust shall not be used around and over the pipeline for a distance of 2 feet above the top of the pipe.
- (b) In longitudinal trenches under roadways or driveways within the right-of-way, the backfill for the entire depth of trench shall be select material compacted by mechanical tamping, power tampers or vibratory compactors in compacted layers not exceeding 8 inches in thickness. The entire backfill shall be compacted to 95% of maximum density as determined by AASHTO Test, Designation T-180.
- (c) In trenches in all other areas, the backfill around and over the pipelines for a distance of 2 feet above the top of pipe shall be thoroughly compacted in 8-inch layers. From the level of 2 feet above the top of the pipelines to the top of the trench the backfill shall be placed in 12-inch layers and compacted until stable. Compaction of backfill by puddling will not be permitted. Artesian will perform random backfill compaction tests to insure the required compaction. If the backfill fails the test, the Contractor will be responsible for reworking the trench and have Artesian's soil consultant perform a new test at the Contractor's cost.

5. Borrow:

- (a) Fill material required for backfilling pipe trenches to original grade, in addition to that obtained from the excavations, shall be provided by Delaware Department of Transportation as described in the Contract Documents and the cost thereof shall not be included in the lump sum price, including where select material is required under all roadway and driveway patches. The required select material shall be included in Delaware Department of Transportation's contract units. Suitable material obtained from the excavations shall be used as backfill will all costs for excavating, stockpiling, dewatering and handling included in the lump sum price.

6. Contractor's Responsibility:

- (a) The Contractor shall maintain and make necessary repairs to all excavations and backfills during the performance of his contract. This repair and maintenance work shall be done immediately. All maintenance and repair work shall be done at the entire expense of the Contractor.
- (b) All material and installation shall conform to Artesian Water Co., Inc. specifications, Ten State Standards, as well as the pipe or other material manufacturer's specifications and recommendations.

- (c) Artesian’s construction inspector does not work weekends or holidays without prior authorization from Artesian. Contractor is to contact Artesian in advance for their holiday schedule.

7. Restoration:

- (a) All disturbed ground shall be restored to its original or better condition as per the construction plans as soon as possible after installation of the water mains and appurtenances. Disturbed grass areas are to be hydro-seeded, to include adequate irrigation for a period of four weeks, as required. Contractor is to comply with the *Delaware Sediment and Erosion Control Handbook for Development* for vegetative stabilization practices. Placing topsoil and seed within the limits of work shown on the plans shall be included in the DelDOT contract items and not included in the lump sum price.
- (b) Roadway patches within the right-of-way if required shall be as detailed in the construction plans.
- (c) Contractor shall restore ground and road surfaces beyond the construction limits of the waterline installation damaged by the Contractor’s equipment at the Contractor’s cost.

SECTION 3: WATER PIPES AND APPURTANANCES

1. General:

- (a) Artesian shall furnish and the Contractor to install water pipe, valves, fittings, and appurtenances in accordance with these specifications and as indicated on the plans and Contract documents. Artesian shall furnish the following materials:

MATERIAL LIST
12 inch sleeve
12 inch 45 degree bend
12 inch 11.25 degree bend
12 inch 22 degree bend
12 inch cap
12 inch valve
12 inch valve box
12 inch x 12 inch tee
12 inch x 16 inch reducer
12 inch tapping sleeve
12 inch tapping valve
12 inch x 1.5 inch stainless steel service saddle
2 inch blow off assembly
16 inch MJ adapter
12 inch DIP
16 inch HDPE

- (b) Contractor shall coordinate with Artesian to schedule pipe delivery to project site a minimum of two weeks prior to the start of water relocation activities. Artesian shall deliver the material during Artesian’s normal business hours. Business Days are Monday through Friday (excluding Artesian’s holiday schedule) regardless of

weather conditions. Artesian's construction inspector works only business days without prior authorization from Artesian. Contractor shall contact Artesian in advance for its holiday schedule.

- (c) The Contractor shall supply and install all other required material including, but not limited to tie rods, pipe clamps, eye rods, turnbuckles, duc lugs, buttressing and shoring. All material so supplied by Contractor must meet Artesian's specifications.

2. Water Main:

- (a) All directionally drilled pipe and fittings shall be high-density polyethylene (HDPE), conforming to AWWA 901/906 standards for potable water line applications. All HDPE pipe and fittings are to be fusion welded. Artesian shall supply all pipe material and deliver to the site. It is the responsibility of the Contractor to unload.
- (b) All ductile iron pipe shall be class 50 tyton joint with a design pressure of 350 psi and a maximum working test pressure of 150 psi. Artesian shall supply all pipe material and deliver to the site. It is the responsibility of the Contractor to unload.

3. Installation:

- (a) Concrete buttresses, thrust blocks and reaction backing as detailed on the construction plans or as directed by Artesian shall be provided at all bends, tees, plugs, tapping sleeves, etc. as shown on the plans. Artesian's inspector may require additional buttressing and restraints at his discretion or as suggested by the pipe manufacturer. Contractor is to provide concrete, straps, anchor bolts, drive pipes, etc.
- (b) No pipe shall be laid upon a foundation into which frost has penetrated, nor at a time when Artesian shall deem that there is a danger of the formation of ice or the penetration of frost at the bottom of the excavation, unless all required precautions as to the minimum length of open trench and promptness of refilling are observed. The Contractor shall maintain a minimum of 42" cover over the water main, unless otherwise shown on the plans.
- (c) Contractor is to provide bricks and concrete blocks for the support of the curb stops and water valves as shown on the construction details.
- (d) The use of chains will not be permitted when handling HDPE pipe. Nylon straps must be used.

4. Defects to be Made Good:

- (a) If, at any time before the final acceptance of the contract, any broken pipes, or any defects, are found in the water mains, or in any of their appurtenance, the Contractor shall cause the same to be removed and replaced by proper material and workmanship, without extra compensation for the labor and material

required, even though such injury or damage may not have been due to any act, default or negligence on the part of the Contractor. All materials shall be carefully examined by the Contractor for defect, just before placing, and any found defective shall not be placed in the line.

5. Hydrostatic Testing:

- (a) The Contractor shall test completed sections of the underground ductile iron water piping for leakage in accordance with the requirements of AWWA C600, 2-hour duration at 150 psi.
- (b) The Contractor shall test completed sections of the underground high-density polyethylene water piping for leakage in accordance with the requirements of ASTM F 2164-02.
- (c) Artesian shall be notified in advance of all tests and the tests shall be conducted to its entire satisfaction.

6. Disinfecting Water Mains:

- (a) The Contractor shall assist Artesian in disinfecting all water mains in accordance with AWWA C601, latest edition.
- (b) Artesian shall be responsible for obtaining bacteriological tests to show that the disinfection has been satisfactory and the main can be placed in service.

SECTION 4: DIRECTIONAL DRILLING

I. GENERAL

A. Description

Directional Drilling shall include, but not necessarily be limited to, installing the water main in accordance with the Contract Documents. The Contractor will furnish all labor, components, tools, and materials other than pipe, fittings and appurtenances necessary or proper for the performance and completion of the contract.

The Contractor will be responsible to:

- 1. Provide drilling rig, associated equipment, and personnel for the duration of the directional drills.
- 2. Mobilize and demobilize equipment and personnel to and from the project location.
- 3. Provide approved guidance system and operator for the pilot hole alignment.
- 4. Provide on site drilling profile plan and final As-Built for Artesian.
- 5. Provide technicians, labor and equipment to haul HDPE, including pipe conveyors.

6. Handle and dispose of contaminated fluids or soils if encountered in the borehole during the drilling operation.
7. Haul and dispose of excess drill cuttings to an approved site.
8. Provide construction stakeout of the project boundaries and main alignments.
9. Provide appropriately sized pulling heads.

Artesian will be responsible to:

1. Obtain all necessary permits, licenses and permission from all authorities and private landowners prior to commencement of work.

B. Quality Assurance

1. Fusing Polyethylene Pipe – The Contractor shall provide a pipe fusing technician and fusing equipment. The technician will provide expertise relating to pipe testing, supplied materials, and pipe handling methods. The technician will be responsible for data logging all pipe fusions.

C. Submittals

1. Experience and Equipment Certification:

- a. Contractor will have been actively engaged in the installation of pipe using directional drilling for a minimum of two (2) years. List of projects completed shall include projects similar in scope and value to this project.
- b. Directional Drilling equipment shall be capable of installing a minimum of 500' of 16" HDPE DR11 pipe per pull.

2. Drawings and Documents:

The Contractor shall submit a written procedure describing in detail the proposed method of installation. This will include, but not be limited to, size, capacity and set-up requirements of equipment, location of drilling and receiving pits; dewatering of applicable, method of fusion and type of equipment for joining pipe; method used for transitions and couplings at valves, tees, and installation pits; type of cutting tool head; and method of monitoring and controlling line and grade. If the Contractor determines that modifications to the method and equipment as stated in the submittal is necessary during construction, the Contractor will submit a plan describing such modifications, including the reasons for the modification.

The written procedure and any modifications shall be approved by Artesian and DelDOT prior to performing the work.

II. MATERIALS

A. Artesian will supply to the site all pipe and fittings per the Material List. Contractor shall supply all other materials.

B. Drilling Fluids:

1. Drilling fluid will be a mixture of water and bentonite clay. The fluid will be inert. The fluid should remain in the tunnel to ensure the stability of the tunnel, reduce drag on the pulled pipe, and provide backfill within the annulus of the pipe and tunnel.
2. Disposal of excess drilling fluid and spoils will be the responsibility of the Contractor who must comply with all relevant regulations, right of way, work space and permit agreements. Excess drilling fluid and spoils will be disposed off-site at an approved location. The Contractor is responsible for transporting all excess drilling fluid and spoils to the disposal site and paying any disposal costs. Excess drilling fluid and spoils will be transported in a manner that prevents accidental spillage onto roadways. Excess drilling fluid and spoils will not be discharged into sanitary or storm drain systems, ditches or waterways.
3. Drilling fluid returns (caused by fracturing of formations) at locations other than the entry and exit points will be minimized. The Contractor will immediately clean up any drilling fluid that surfaces through fracturing.
4. Mobile spoils removal equipment capable of quickly removing spills from entry or exit pits and areas with returns caused by fracturing will be present during drilling operations to fulfill the requirements of paragraphs 2 and 3 above.
5. The Contractor will be responsible for making provisions for the conveyance of water for the mixing of drilling operation. Artesian can provide potable water for the Contractor's use within approximately 600' from the drill entry point. The Contractor must supply the necessary equipment to transport water from a site designated by Artesian.

III. EXECUTION

A. General

1. Drilling operations must not interfere with, interrupt or endanger surface and activity upon the surface.
2. Contractor must comply with all applicable jurisdictional codes and OSHA requirements.
3. Dewatering of pits and excavations shall be in accordance with the Department of Natural Resources and Environmental Control.
4. Construction activities are limited to the Temporary Construction Easements, Permanent Easements, and Rights of Way as shown on the Construction Plans, unless the Contractor obtains all necessary prior approvals from all affected reviewing agencies and property owners.
5. Compaction requirements refer to open cut pipe installations, and restoration of construction access pits.

B. Directional Drilling Operations

1. Equipment

- a. The drilling equipment must be capable of placing the pipe within the limits indicated on the contract plans.
- b. The Directional Drilling system shall consist of a surface launched steerable drilling tool controlled from a mobile drilling frame, and include a field power unit, mud mixing system and mobile spoils extraction system.
- c. The number of access pits shall be kept to a minimum and the equipment must be capable of boring and installing a continual run of 500' of 16" HDPE DR11 pipe without intermediate pits.
- d. The guidance system shall have the capability of measuring vertical (depth) position and roll. The guidance system must be capable of installing the pipeline in accordance with the design.
- e. Equipment set-up requirements must be determined by the Contractor and submitted to Artesian per the requirements as stated under "Submittals."
- f. Required Safety Equipment: During drilling operations all equipment shall be effectively grounded and incorporate a system that protects operation personnel from electrical hazards. The system shall be equipped with an audible alarm that can sense if contact is made with an energized electric cable. Proper operation of the alarm system will be confirmed prior to drilling each tunnel. All equipment will be connected to ground with a copper conductor capable of handling the maximum anticipated fault current. Crew members operating drilling equipment and handling rods will do so while standing on grounded wire mesh mats, ensuring that all equipment is grounded, and wearing hot boots, hot gloves, safety glasses and hard hats. Crew members operating handheld locating equipment will wear hot boots.

2. Pilot Hole Boring

- a. The entry angle of the pilot hole and the boring process will maintain a curvature that does not exceed the allowable bending radii of the product pipe.
- b. Alignment Adjustments and Restarts
 - i. The Contractor will follow the pipeline alignment as shown on the Construction Plans, within the specifications stated. Adjustments to the plans to accommodate equipment, installation, and material requirements will be considered by Artesian provided that the

original intent of the design is followed. If adjustments are required, the Contractor will notify Artesian and DeIDOT for approval prior to making the adjustments.

- ii. In the event of difficulties at any time during boring operations requiring the complete withdrawal from the tunnel, the Contractor will be allowed to withdraw and abandon the tunnel and begin a second attempt at a location approved by Artesian and DeIDOT. All costs for withdrawing and re-drilling of tunnels shall be borne by the Contractor, and no claims for delays will be considered.

3. Installing Product Pipe

- a. After the pilot hole is completed, the Contractor will install a swivel to the reamer and commence pullback operations. Pre-reaming of the tunnel may be necessary and is at the option of the Contractor.
 - b. Reaming diameter will not exceed 1.5 times the diameter of the product pipe being installed.
 - c. The product pipe being pulled into the tunnel will be protected and supported so that it moves freely and is not damaged by stones and debris on the ground during installation.
 - d. Pullback forces will not exceed the allowable pulling forces for the product pipe.
 - e. The Contractor will allow sufficient lengths of product pipe to extend past the termination point to allow connections to adjacent pipe sections. Pulled pipe will be allowed 24 hours of stabilization prior to making tie-ins. The length of extra product pipe will be sufficient to make all necessary connections and tests.
4. Clean up: the Contractor is required to maintain the work site in a neat and orderly condition throughout the period of work and after completing the work at each site, remove debris, surplus material and temporary structures erected by the Contractor. The site must be restored to a condition equal to the existing condition prior to being disturbed.

SECTION 5: ARTESIAN WATER COMPANY APPROVED CONTRACTORS

Contractor Name	Approved Work Type	Address	City	State	Zip	Office Phone
A P Croll & Son, Inc.	Pipeline	P.O. Box 748, Route 9	Georgetown	DE	19947	302-856-6177
A-Del Construction Company	Pipeline	10 Adel Drive	Newark	DE	19702-1331	302-453-8286
Allan Myers	Pipeline	1805 Berks Road, P.O. Box 98	Worcester	PA	19490	302-584-6020
Austin Bednash Construction, Inc.	Pipeline	5756 Summit Bridge Road	Townsend	DE	19734	302-368-7552
Aztech Contracting, Inc.	Pipeline	312 Seeneytown Road	Clayton	DE	19938	302-653-1460
Brandywine Construction	Pipeline, Directional Drill	101 Pigeon Point Road	New Castle	DE	19720	302-571-9773
Bulldog Construction Co., Inc.	Pipeline	1120 Valley Rd	Coatesville	PA	19320	610-383-7042
Christiana Excavating	Pipeline	2042 Sunset Lake Road	Newark	DE	19702	302-738-8660
Crouse Brothers, Inc.	Pipeline	415 West Pulaski Highway	Elkton	MD	21921	410-398-1531
Diamond Materials	Pipeline	924 S. Heald Street	Wilmington	DE	19801	302-658-6524
Dixie Construction	Pipeline	22237 Lewes-Georgetown Highway	Georgetown	DE	19947	302-858-5007
Dixon Contracting, Inc.	Pipeline	1614 Seenytown Road	Dover	DE	19904	302-653-4623
Eastern States Construction	Pipeline	702 First State Boulevard	Wilmington	DE	19804	302-995-2259 x13
Greggo & Ferrara, Inc.	Pipeline	4048 New Castle Avenue	New Castle	DE	19720	302-658-5241 x229
Guardian Construction Company, Inc.	Pipeline	101 Rogers Road, Suite 101	Wilmington	DE	19801	302-834-1000
Henkels & McCoy	Pipeline	512 Elbow Lane	Burlington	NJ	08016	609-387-9000 ext. 222
J.J.I.D., Inc.	Pipeline	100 Julian Lane	Bear	DE	19701	302-836-0414
Joseph T. Hardy & Son	Pipeline	425 Airport Road	New Castle	DE	19720	302-328-9457
Kent Construction Company, Inc.	Pipeline	2 Big Oak Road	Smyrna	DE	19977	302-653-6469
Larimore Construction, Inc.	Pipeline	1231 South DuPont Blvd, Unit 103	Smyrna	DE	19977	302-697-4444
Melvin L. Joseph Construction Company, Inc.	Pipeline	25136 DuPont Boulevard	Georgetown	DE	19947	302-856-7396
Nichols Excavation & Landscaping	Pipeline	2742 Pulaski Highway	Newark	DE	19702	302-834-2426
Pearce & Moretto, Inc.	Pipeline	P.O. Box 272, 314 Baywest Boulevard, Suite C	New Castle	DE	19720	302-326-0707
Sprig Construction	Pipeline, Directional Drill	210 Abbotsford Drive	Middletown	DE	19709	302-464-2488
Spring & Associates, Inc.	Pipeline, Directional Drill	114 N. Washington Street	Easton	MD	21601	410- 822-0485
Stewart & Tate, Inc.	Pipeline	1723 Principlo Furnace Rd	Perryville	MD	21903	410-642-9166
Teal Construction, Inc.	Pipeline	612 Mary Street, P.O. Box 779	Dover	DE	19901	302-678-9500
Technivate, Inc.	Pipeline	1020 Broad Run Road	Landenberg	PA	19350	610-274-8009 ext 220

END OF DOCUMENT

01/13/13