



# Town of Florence, Arizona

## NOTICE OF FORMAL SOLICITATION

**SOLICITATION TYPE:** INVITATION FOR BIDS

**COMMODITY/SERVICE SOUGHT:** Skid Mounted 1.5 M Belt Filter Press and Associated Equipment

**BID DUE DATE AND TIME:** Date: November 3, 2016  
at 2:00 PM local time

**LOCATION:** Town of Florence  
Town Clerk's Office  
775 N Main Street  
Florence, AZ 85132

Bids shall be enclosed in a sealed envelope clearly identified as “Skid Mounted 1.5 M Belt Filter Press and Associated Equipment”. The name and address of the entity submitting the Bid shall also be clearly marked on the sealed envelope. It is the sole responsibility of the entity submitting the bid to see that his/her bid is received at the proper time. The bid shall be submitted no later than November 3, 2016, 2:00 pm, to the Town of Florence, located at 775 N Main Street, Florence, AZ 85132. All bids shall be opened in public and the name of each bidder and the amount of its bid shall be publicly read. Late bids will not be considered and will be returned unopened. Bid's “faxed” or emailed to the Town shall not be accepted.

Every bid shall be accompanied by a certified check, cashier's check or surety bond for ten percent (10%) of the amount of the bid as a guarantee that if selected, the bidder will enter into a contract to perform the work in accordance with the contract documents. Any surety bond submitted in compliance with this requirement shall be executed by a surety company or companies holding a certificate of authority to transact surety business in this state issued by the director of the Department of Insurance pursuant to Arizona Revised Statutes Title 20, Chapter 2, Article 1; shall follow the form prescribed in Arizona Revised Statutes

**Section 34-201; and all liabilities on the bond shall be determined in accordance with that section as if it were copied at length therein.**

**The Town of Florence will select a vendor based on the lowest responsible and responsive bid. The Town reserves the right to waive informalities in any bid and to reject any or all bids in whole or in part with or without cause and/or to accept the bid that, in its judgment, will be in the best interest of the Town. The Town reserves the right to reject any conditional bid and will normally reject those which make it impossible to determine the intent of the bid. All bidders must fully understand the “all inclusive” nature of the Town’s work scope request and must therefore structure their bid to eliminate contingency pricing.**

**The Town of Florence seeks the services of a qualified Skid Mounted 1.5 M Belt Filter Press and Associated Equipment Company to provide associated services work is generally described as:**

- 1. Provide Labor, Equipment, Materials and Expendables**
- 2. Provide Warranty**
- 3. Propose Schedule for Manufacture and Delivery and Completion of Work**

#### **SERVICES REQUIRED**

**The Town of Florence will require a State of Arizona licensed and Town of Florence licensed company to provide the equipment and perform the services.**

**This Invitation for Bids (“IFB”) includes the following:**

- Cost - The proposed costs and fees for the project. Please identify any subcontractors that will be used.**
- Schedule - This is a time sensitive project that needs to be completed on schedule. The Town wishes the project to be completed within fourteen (14) weeks of Notice to Proceed.**
- Relevant Experience - The company or entity must have at least five (5) years of experience as a licensed contractor in Arizona performing similar work on potable water storage tanks.**
- Client List - References will be request of the selected Company.**

#### **I. EVALUATION CRITERIA**

**Any company or individual responding to this IFB should be advised that the following experience and responsibilities will be necessary for the success of the selected contractor:**

1. Flexibility in scheduling.
2. Ability to provide equipment and services requested in a timely manner
3. Applicable license, insurance and bonding

**Evaluation Criteria – For each of the Required Services included in the response to the IFB, these criteria will be used evaluate the bid:**

1. Cost - The bid price. Please identify any subcontractors that will be used.
2. Schedule - Start Date and Completion Date (This project is time sensitive and completion time will be a factor in the selection of the lowest responsive responsible bid.)
3. References
4. Demonstrated ability to complete the work.

Questions and to schedule site visits related to this IFB can be sent to Christopher Salas, P.E., Town Engineer. Questions related to this IFB can be directed to Paul Hendricks, EUSI, 623 204 4901 or [phendricks@cox.net](mailto:phendricks@cox.net).

**Publish Dates: October 13, 2016, 2016 and October 20, 2016**

**PUBLISHERS AFFIDAVIT REQUIRED**

# Florence Belt Filter Press (BFP) Technical Specification

October 2016

## General System Description

All components of the sludge dewatering system shall be engineered for long, continuous, and uninterrupted service. Provisions shall be made for easy lubrication, adjustment, or replacement of all parts. Corresponding parts of multiple units shall be interchangeable.

All equipment shall be factory assembled and tested prior to shipment to ensure proper operation of all systems, and be readied for field connections. Any and all parts that may be easily damaged during shipping, storage and installation and that can be easily field assembled after installation shall be packaged separately, with approval of the Owner.

The sludge dewatering system shall consist of one (1) 1.5 M (or greater in width) Belt Filter Press, Ancillary Equipment, Interconnecting Wiring and at a minimum:

- Positive displacement sludge feed pump with VFD direct gear drive motor
- Sludge Feed Flow Meter
- Emulsion polymer feed/blend system
- In-line adjustable sludge/polymer mixer with injection ring
- Sludge Retention and Polymer piping
- Skid mounted Belt filter press unit
- Belt tracking & tensioning
- Air compressor with receiver
- Wash water Booster pump
- Sludge flow meter
- NEMA 4X electrical control panel with Man Machine Operator Interface
- Interconnecting wiring & plumbing
- Sludge Cake Discharge Conveyor
- Spare Parts
- Delivery
- Start Up and Training

Belt filter press shall be designed to dewater aerobically digested biological sludge and meet the following performance criteria:

Feed Solids:	1.0 – 1.5 %
Hydraulic Loading:	100 - 150 gpm
Cake Solids:	16 – 18 % (Passing Paint Filter Test)
Capture:	95% of TSS
Polymer Usage:	10 - 20 #/ton D.S. (As Delivered)

Compliance with the performance section of these specifications shall not relieve the Manufacturer of the responsibility to provide equipment which is mechanically and structurally equal to the specified equipment.

## **Scope of Work**

The Scope shall include furnishing of all equipment specified, operation/maintenance manuals, spare parts, start-up and training, performance testing and delivery to job site, a complete sludge dewatering system including 1 belt filter press, complete with ancillary equipment to meet the specified minimum performance and quality requirements.

- A. The manufacturer shall provide one complete skid mounted 1.5m meter belt filter press dewatering systems as specified herein. The system shall include the press, hydraulic unit, water booster pump, discharge chute, polymer system, sludge pump and flow meter, discharge conveyor sufficient deliver sludge cake to an adjacent 20 yard roll off unit, spare parts, and all electrical controls. The belt press equipment shall be provided by a single supplier to ensure coordination and compatibility of equipment.
  
- B. The belt filter press manufacturers are advised to familiarize themselves with the Town of Florence overall plant site and process in order to evaluate the compatibility of the manufacturer's equipment to dewater the particular sludge generated.
  
- C. The system shall consist of a gravity belt thickener zone and a continuous belt press. It shall be designed to receive secondary aerobically digested biosolids, concentrate it and dewater the sludge by means of belts made of synthetic fiber mesh that will dewater the sludge, to pass a paint filter test required by the landfill, arranged to perform the conveying, gravity draining, pressing, and dewatering functions. The zones shall be gravity drainage at operator level, wedge, and pressure/shear sections.

## **Quality Assurance**

Consideration will be given only to products of manufacturers who can demonstrate that their equipment fully complies with all requirements of the specifications and contract documents. The equipment shall be supplied by a firm which has been regularly engaged in the design, fabrication, assembly, testing, start-up and service of full scale belt filter presses operating in the U.S., with similar sludge, for a period of not less than ten (10) years prior to the bid date of this contract. The bidder shall submit data to substantiate the manufacturer's experience.

If a bidding belt press manufacturer does not have a formal quality system in place, or documentation to prove so, a performance/maintenance bond in the amount of 100% of the installed price (including equipment, labor, piping, and wiring associated with the system covered under this specification) shall be included in the bid proposal. The bond should be made out to the Owner for 100% of the amount bid, and shall be in force for a minimum of five (5) years from the date of first beneficial use of the equipment.

## **Quality Assurance**

All equipment specified under this Section, shall be furnished by a single Belt Press manufacturer, who is fully experienced, reputable, and qualified in the production of the major equipment items to be furnished. The belt filter press manufacture shall be

responsible for the overall sludge dewatering system, as well as, controls for sludge dewatering equipment furnished under this section.

Consideration will be given only to products of manufacturers who can demonstrate that their equipment complies with all requirements of the specifications, warranties and contract documents. The owner, at all times, are the sole judge of "Exact Equivalent", or "Approved Alternate" and "Or Equal" designations to the specifications.

Manufacturers/Suppliers shall be required to supply a performance bond. The performance guarantee bond shall be provided by the Belt Press supplier to the Owner in the amount of 150% of the bid price. The bond shall remain in effect for one (1) year from date of belt press system approved acceptance.

All listed and required standards and/or codes shall be met as a minimum requirement and it shall be construed to mean the latest standard, code, specification or tentative specification adopted and published at the time of advertisement for Bids.

No equipment or bids will be accepted unless they meet all minimum specification requirements including all items listed under "No Substitutes Allowed".

### **Patents**

The manufacturer warrants that the use of this system and its equipment, in the process for which the system has been expressly designed, will not infringe any U.S. or foreign patents or patents pending. In the event of any claim of infringement, the manufacturer shall defend and indemnify the owner free from any liabilities associated with the use of the patented equipment or process.

The manufacturer hereby grants to the owner, in perpetuity, a paid-up license to use any inventions covered by patent or patents pending, owned, or controlled by the manufacture in the operation of the facility being constructed in conjunction with the equipment supplied under this contract, but without the right to grant sublicenses.

### **Warranty**

The manufacturer shall warrant, in writing that all equipment supplied by them shall be free from defects in material and workmanship, for a period of twenty four (24) months from the date of startup, not to exceed thirty (30) months from the date of delivery.

The manufacture shall, at its own expense, furnish all labor, materials, tools and equipment and shall perform all work required to repair or replace work found to be defective or damaged as a result of defective work during the warranty period.

The Owner shall notify the Manufacturer of defective work by registered letter. The Manufacturer shall have 15 days from the date of notification to proceed with corrective action.

### **Conditions of Service**

The sludge dewatering equipment shall be designed to adequately condition and dewater the sludge so that a dewatered sludge cake is produced meeting the required minimum performance requirements and pass the paint filter test. The sludge cake shall easily discharge from the dewatering unit without blinding and that may be handled by the required conveying equipment.

Each unit shall be designed to operate in the environment for which it is intended, continuously or intermittently on demand, and shall perform the required dewatering operations without spillage of water or sludge beyond the nominal machine envelope.

### **Submittals**

Submit within 45 days of notice to proceed, 4 copies of the following information in sufficient detail to demonstrate that the proposed equipment fully meets the requirements of the specifications:

Shop Drawings- Dimensional shop and erection drawings for all equipment supplied under this section along with all interconnecting components. Include sizes & thicknesses of materials, type of materials used and associated engineering calculations demonstrating all structural and roller deflection tolerances are maintain at maximum 50 PLI and 15 feet per minute operating speed with minimum safety factor of 4.

Descriptive Literature- Catalog cut sheets, technical data, performance curves and utility requirements for all equipment supplied under this section. All information is to be provided in sufficient detail for the engineer to assess conformance to the design criteria..

Electrical- Detailed wiring diagrams, instrumentation and operational description of entire control system along with complete electrical bill of materials.

Operation and Maintenance Instructions- Complete operation and maintenance manuals as listed under this section, will be provided upon delivery of equipment.

Bonds- All required Performance and Maintenance Bonds.

## **Operating and Maintenance Data**

The Manufacturer shall provide a total of four copies with delivery of equipment a complete and comprehensive reference manual containing operating and maintenance data to enable operators and plant engineers to correctly operate service and maintain all equipment and accessories covered by these Specification and Drawings. The data contained in the manual shall explain and illustrate clearly and simply all principals and theory of operation, operating instructions, maintenance procedures, calibration procedures, safety precautions, trouble shooting procedures, suggested forms for required record keeping, detailed equipment drawings, electrical and instrumentation schematics.

Each copy of the manual shall be assembled in one or more loose leaf 3-ring hard backed binders. Each binder shall be clearly labeled with identifying cover showing project and manual title. All composition and printing shall be arranged so that punching does not obliterate any data and each section shall be clearly marked.

## **Manufacturer's Supervisory Services and Testing**

The Manufacturer shall furnish the services only of a qualified factory field service technician for a minimum period of five (5) days at the job-site and to be covered in up to Three (3) trips as listed below. Additional service, if requested, shall be available at the Manufacturers listed portal to portal per diem rate in effect at time of delivery of service, plus all travel and living expenses.

**Installation:** After the first site visit, the equipment Manufacturer requires in writing that all installation is completed prior to arriving at the job site for inspection and start-up by the Owner or contractor. A qualified field service technician shall inspect all supplied equipment by the Manufacturer for damage and correct placement for required service and operation. This is in addition to the five (5) days listed above.

**Start-up:** A minimum of one day shall be used to perform equipment and system start-up testing and calibrations to be followed by performance testing.

**Performance Testing:** The Owner shall supply representative sludge as outlined in this Specification. Testing shall consist of test taken in a one day period of operation. Duration of testing shall be during four hours of uninterrupted system operation. Samples shall be taken once per hour and shall be grab samples. Samples shall be tested by the owner or an independent laboratory and all results shall be given directly to the Owner and Manufacturer. All samples and testing shall be those required to determine if all design and performance requirements specified are met.

If the results of the performance tests are unsatisfactory, the Manufacturer shall make the necessary modifications to comply with the requirements at no cost to the Owner or contractor. This time shall not count in the five (5) days listed above. After the modifications are made, the performance test shall be repeated at no additional cost to the Owner, up to a maximum of three times in order to meet

performance requirements. If the results of the performance test are unsatisfactory after three trials the Owner may, at its option, keep all or part of the performance bond and withholdings.

**Training:** The Manufacturer's service technician shall train the Owners personnel on equipment operation, maintenance and troubleshooting with a minimum of four hours of operation manual review and four hours of hands on equipment and system operation.

### **Delivery, Storage & Handling**

The Manufacturer will furnish and deliver all equipment, freight prepaid to the South Wastewater Treatment Plant, Town of Florence, Arizona.

The Manufacturer shall also instruct the Owner on equipment type and size necessary to remove equipment from transport vehicle.

All equipment shall be delivered with all required protective packaging to prevent any damage from transportation. Each container shall be clearly marked with contents contained inside.

### **Payment Terms**

Twenty percent (20%) of payment shall be made upon approval of notice to proceed and approved submittals, sixty percent (60%) will be made within 30 days of delivery of equipment, twenty (20%) shall be paid within 30 days of final acceptance and successful performance testing of the equipment.

### **No Substitutes Allowed**

For all the equipment included the Specifications the following items are not to be excluded from any manufacturer proposed for bidding purposes. The following list is only a guide to meeting the requirements contained in these Specifications and does not exempt the manufacture from conforming to all of the Specifications.

- Meet National Electrical Codes and OSHA Standards.
- Any material used for direct contact with sludge or polyelectrolyte shall be wear resistant plastic, 304, 201 or 316 stainless steel or better and as approved by the Owner.
- All electrical motors shall be rated for wash-down service and have a minimum operating service factor of 1.15.
- All electrical components used shall be UL listed and properly rated for the use intended.
- All liquid piping shall be schedule 80 PVC or better.
- Equipment shall be specifically designed and constructed for long life & continuous operation in humid and corrosive atmospheric environments.
- BFP frame, collection pans, curbing, all press rolls and shafts shall be of 304 stainless steel or better and as approved by the Owner.
- BFP shall be at least twin pressure belt design, a gravity drain section and three distinct dewatering sections, both belts positively driven, individually

- tensioned and have automatic belt tracking.
- Belt Filter Press should have a minimum of 8 high pressure rolls constructed of 304 stainless steel, non-coated
  - Belt Filter Press Frame shall have a minimum safety factor strength factor of 4 at 50 PLI belt tension
  - Electrical Operator controls shall be a fully integrated Touch Screen Control Panel.
  - Controls shall mounted on the Skid and include a Belt Press Mounted Control Station with the following minimum functions: Start/Stop, Alarm Silence, Sludge Feed Hold, Adjustment of all System Timers, Belt, Sludge Pump and Polymer Pump Rates and Display of Alarms, and SCADA output as approved by the Owner.

### **Equipment Scope**

- A. The manufacture shall provide one totally self-contained, factory assembled 1.5 meter or greater effective width belt filter press, designed to extract water from the type specified herein. The BFP shall utilize the combination of chemical conditioning of the sludge, drainage of free water in the inclined gravity zone, gentle compression of the sludge in the wedge zone, and the final compression of the solids in the high pressure/shear zone, producing a sludge cake with the minimum D.W.S. percent solids as listed in Specifications and that shall pass the standard Paint Filter test that complies with landfill disposal requirements. The BFP shall be delivered to the job site completely assembled, ready to install.
- B. The fabricated stainless steel frame (or approved equal) shall be designed to withstand the maximum stresses imposed on the individual members with a safety factor of 4. The deflection ratio of any structural members shall not exceed  $L/600$  where L is the member span length.
- C. The BFP construction shall allow easy access to internal components, operational adjustments, and routine maintenance shall be possible without taking the BFP out of service. Any disassembly required for maintenance and repair shall be possible within 3 feet of clearance on one side and 5 feet of clearance on the other side.
- D. All components of the BFP shall be engineered for long, continuous and uninterrupted service. With all metal fabricated parts and fasteners shall be of stainless steel and all welding shall be in accordance with the latest applicable codes of the American Welding Society.

## **Materials and Coatings**

- A. All materials used in the construction of the sludge dewatering equipment shall be of the best quality and entirely suitable in every respect for the service required. All structural stainless steel shall conform to the ASTM Standard Specification for Structural Stainless Steel. All iron castings shall conform to the ASTM Standard Specifications for Gray Iron Castings and shall be of a class suitable for the purpose intended. Other materials shall conform to the ASTM Specifications where such specifications exist and the use of such materials shall be based on continuous and successful used under similar conditions of service.
  
- B. All electrical components shall be U.L. listed where such listings exist and all electrical control panels shall be assembled in U.L. approved facilities.

The following materials and coatings shall be provided for the belt filter press and related components unless specified otherwise herein:

Bearing Housings	Epoxy Coated, cast iron
Inclined Gravity and Wedge Zone Grids	304 Stainless Steel Supports, fitted (or approved equal) with U.H.M.W. Polyethylene wiper bars
Belt Wash Housing	304 Stainless Steel, 12 gauge (or approved equal)
Belt Wash Spray Tube and Nozzles	304 Stainless steel 304 Stainless Steel with Internal Brush
Belt Wash Piping	Supply Piping Schedule 80 PVC, 1 ½ inch
Plows	304 Stainless Steel Supports, Holders and U.H.M.W. Plows
Sludge Containment Barriers	304 Stainless Steel, 14 gauge
Discharge Chute	304 Stainless Steel
Doctor Blades	U.H.M.W. Polyethylene, Dual Edged
Drain Trays	304 Stainless Steel, 14 gauge
Drain Tray Piping	Schedule 80 PVC
Frame	304 Stainless Steel (or approved equal)

Hardware, Fasteners, Springs	18-8, 304 & 316 Stainless Steel Clips, Etc.
Rollers Belt Drive	304 Stainless Steel Core, Coated with Buna N rubber, 1/4 inch minimum, 304 Stainless Steel End Plates and Shafts
Rollers (all others)	304 Stainless Steel Cores, Through/Stub Shafts and End Plates

All items listed as stainless steel shall not be coated with exception to the coated drive rolls. Zinc flame spray, epoxy painted, nylon coated and/or hot dip galvanizing of any material that is not authentic alloy stainless steel shall not be considered an acceptable substitute to this specification. Types 201 and 316 shall be considered equal and acceptable in lieu of type 304 stainless steel, with approval of the Owner.

### **Structural Main Frame**

- A. The structural main frame shall be fabricated and continuously welded of stainless steel plate, and tubing conforming to ASTM Standard Specifications for Structural Stainless Steel, into a rigid structure, adequately braced to withstand intended loads without excessive vibration or deflection during operation (or approved equal).
- B. Maximum load on the frame, rollers and bearings shall be based on the summation of forces applied to the frame from roller mass forces, weight of the rollers including the sludge and belts and static belt tension of 50 pli per belt. The frame shall have a minimum design safety factor greater than 4, and frame deflection shall not exceed 0.050 inches under the above specified loading forces.
- C. The framework shall be of all welded construction. All welding shall conform to the American Welding Society Machinery and Equipment Welding Code: ANSI/AWS D14.4. Bolted construction of any main supporting frame member is not acceptable for this specification.

- D. The frame design construction shall be of an open, compact design allowing for easy maintenance, cleaning and simplicity. Removal of one item shall not require the removal of another except where it more practical to remove the belts for ease of service.

### **Gravity Drainage Section**

- A. The belt filter press shall be furnished with a gravity drainage section to accept the conditioned sludge with a sludge inlet assembly consisting of a distribution feed box and a underflow leveling weir designed to adjust the required sludge pool depth and to uniformly distribute the conditioned sludge across the entire working width of the gravity zone. The entire assembly and necessary supports shall be constructed of stainless steel (or approved equal).
- B. The gravity section shall have a minimum dewatering area of 45 square feet through which free water drainage shall occur. Side skirts constructed of 14-gauge, stainless steel shall be mounted on both sides of belt and at the sludge feed end of the gravity section. These side skirts shall be fitted with urethane seals to prevent any leakage of sludge.
- C. The belt shall be supported and ride on top of a series of UHMW polyethylene replaceable wear strips, 2 inches wider than the belt on both sides and spaced no farther apart than 2.5 inches on center. The replaceable wear strips shall be held in place and supported by a stainless steel support assembly (or approved equal).
- D. There shall be a minimum of four (4) rows of plows and two (2) adjustable sludge weirs in the gravity section in order minimize polymer use, maximize hydraulic and solids loading rates, and promote more rapid drainage of free water from the sludge. Each plow shall be of UHMW polyethylene and shall be mounted and supported by a stainless steel individually adjustable plow assembly. All assemblies shall be equipped with lifting handles to raise and lock each row in an upright, out of service position.

- E. All filtrate shall be collected in a 14-gauge, stainless steel drain pan beneath the gravity drainage section. At no time should any gravity filtrate drip from the gravity drainage area into another area on the BFP. The drain pan shall collect the filtrate and direct it to the collection sump beneath the press through rigid schedule 80 PVC pipe, sized to handle the maximum combined sludge and wash water flows to the press without flooding.

### **Low Pressure (Wedge) Section**

- A. Each belt filter press shall be furnished with two (2) pressure sections following the gravity drainage section. The first stage of the pressure section shall be the radius increasing low pressure (wedge) zone, where the upper and lower belts gradually converge with the sludge sandwiched between the belts. In the wedge zone the sludge cake is prepared for the shear pressure zone by generating continuously increasing pressure on the sludge as it travels through the zone.
- B. The radius pressure grid wedge zone shall have an active dewatering area of 34 square feet which is defined as the (belt width minus 2) inches times the length of belt in which the belts are in convergence (touching) when empty times two plus the (belt width -2") times the length of the zone where the belts are not converged. The belts shall be supported and ride on top of a series of UHMW polyethylene replaceable wear strips, 2 inches wider than the belt on both sides and spaced 2.5 inches. The replaceable wear strips shall be held in place and supported by a 304 stainless steel support assembly (or approved equal).
- C. The belt supporting grid in the wedge zone shall be horizontal and blend into a gradual downward curve that shall be tangent to a radius, enveloping the sludge between the two belts and providing water to freely escape from the sludge, through both sides of the belt and diverted to the collection sump beneath the press with a 14-gauge, stainless steel catch tray.
- D. Any wedge sections requiring operator adjustments, containment seals, rollers or anything that will impede filtrate drainage through both sides of the belts or any other mechanical force to achieve dewatering in this section shall not be acceptable.

## High Pressure (Shear) Section

- A. The second stage of the pressure section shall be the high pressure (shear) zone consisting of rollers arranged to provide a serpentine (S) shaped pattern of belt travel. Rollers shall be constructed as specified under "Rollers". The rollers shall be supported by bearings mounted on the end shafts as specified under "Bearings".
- B. Eight (8) high pressure rolls (or approved equal) shall supply compression and shear reversals on the sludge sandwiched between the two tensioned belts. The first high pressure roller shall be self-bailing drainage type, a minimum of 20 inches in diameter with a minimum open area of 50% of the roller surface and be of 304 stainless steel construction (or approved equal).
- C. The remainder of the high pressure rollers shall be solid 304 stainless steel surface (or approved equal) rolls and shall vary from 14 to 10.75 to 8.625 to 6 5/8 inches in diameter with 3 progressive decreases in diameter to provide the proper combination of dewatering area, applied pressure profile and time under pressure, with a typical belt contact wrap of 180° providing a pressure contact area with the rollers of 56 square feet.
- D. All drainage pans shall be constructed of 14-gauge, stainless steel and shall not be required under the shear/high pressure section, except in such cases where the belt path configuration is such that a local drain pan is required to prevent downstream re-wetting of the sludge cake.

## Rollers

- A. All rollers shall be of welded 304 stainless steel (or approved equal) construction and be warranted for a minimum of 3 years. Roller shafts shall have a minimum diameter of 2 ½ inches inside the roller and machined to a minimum diameter of 2 7/16 inches into and through the supporting bearing. All shafts and plates must be welded in place. Rollers shall be Triple stub plate design with flush welded stainless steel end caps and shafts. Bolted in place shafts are not acceptable for this specification.
- B. All rollers shall be designed to have a maximum deflection of 0.09

inches at mid-span and under maximum loading conditions. Maximum loading shall be based on the maximum summation of all forces applied to the roller including, but not limited to, the forces exerted by the belt tension, and roller mass. Certified calculations shall be submitted as part of the shop drawing submittal verifying compliance.

- C. Both belt drive rolls shall have a minimum of 1/4 inch thick 70 durometer vulcanized Buna N rubber for positive gripping of the belts. Single belt drive roll is not acceptable for this specification and the coating of any other press roll other than drive rolls shall not be acceptable unless approved specifically by the Owner.
- D. The self-bailing drainage roll shall be fabricated to provide a minimum of 50% open drainage area on the surface of the roll and be a minimum of 20 inches in diameter. The design shall be such the drainage roll will promote the rapid removal of water from the pressure area without any spillage outside of the press frame.
- E. All bearing journals shall have a minimum fatigue safety factor of 2.0 at the maximum loading rate of 50 PLI belt tension at a minimum rotation rate belt speed of 15 fpm. The ends of the shafts of each roller shall be equipped with support bearings as specified under "Bearings".

## **Bearings**

- A. All rollers shall be supported by outboard mounted greaseable type, self aligning, heavy duty, bearing. The bearings shall be a metal caged, double row, spherical roller bearing. The housing shall be ASTM A48 Class 30 cast iron. Seals shall be a Triple Lip design.
- B. All bearings shall have a minimum L-10 bearing life of 225,000 hours at 50 PLI and 15 fpm as calculated by using the latest ANSI/AFBMA standard. Maximum loading shall be based on the maximum summation of all forces applied to the roller including, but not limited to, the forces exerted by the belt tension, and roller mass. Certified calculations shall be submitted as part of the shop drawing submittal verifying compliance.

- C. All bearing housings shall be furnished with a specially prepared surface having a factory applied urethane finish for added corrosion protection. All bearing hardware shall be stainless steel.
- D. The manufacturer of the belt filter press shall warrant the complete bearing assembly, as specified herein, for a period of three (3) years from the date of acceptance of the equipment. The Owner shall endeavor to lubricate bearings sufficiently and according to required maintenance schedules.

### **Dewatering Belts**

- A. Each press shall be provided with at least two dewatering belts which shall be seamed and fabricated of wear-resistant monofilament polyester. The mesh design shall be selected for optimum dewatering of the sludge to be processed with minimum blinding of the filter belt pores. A 316 stainless steel connecting splice shall be used for lacing of the belts and have minimum tensile strength, 5 times normal maximum dynamic tension to which the belts shall be subjected to.
- B. Each belt shall be a minimum of 67 inches wide, providing an effective 1.5 meter, or greater, active belt width in contact with the sludge.
- C. All belts shall be designed for ease of service and shall have a minimum life of 2,000 hours of continuous operation at rate design conditions.

### **Belt Tensioning System**

- A. Each belt shall be provided with an individually adjustable pneumatic belt tensioning system with central NEMA 4X housed control panel, capable of adjusting belt tension to a maximum of 50 PLI (lbs. linear inch) of belt width. Hydraulic systems shall not be acceptable for this application.
- B. Belt tension settings shall be manually controlled and shall be capable of adjustments while the BFP is in operation.

- C. The belt tensioning shall be actuated by pneumatic bellows (or approved equal), attached from the frame member of sufficient schedule to support the pressure to the tension arm and roller, assuring parallel movement to the tension rollers and belts.
- D. All pneumatic piping shall be firmly anchored to the structural frame of the press. All lines shall be sized according to its intended use and operating pressure, with a safety factor not less than 4. Multiple lines shall be protected by suitable PVC conduit or SS wire tray. There shall be no more than 36" of line exposed.
- E. The NEMA 4X control panel shall be furnished with individual controls for belts and the belt steering rolls.

### **Belt Tracking System**

- A. The belt tracking system shall automatically and continuously align and maintain the belt position on the rollers during operation of BFP. Each belt shall be monitored by a belt tracking sensor assembly which shall continually contact the edge of the belt. The paddle shall send a signal to the pilot valve located in the pneumatic control panel, which controls the tracking bellows that moves the belt skewing roll.
- B. Automatic electro-pneumatic system shall be provided to assure proper alignment of both belts at all times. These shall operate without sharp, sudden movements of the filter belt or alignment roller.
- C. The skewing alignment roll is positioned, in a transverse position to guide the belts centrally along their path.
- D. NEMA 4X proximity sensors shall be provided to detect any major misalignment in the tracking system. This shall be used to de-energize all drives and sound an alarm in case of belt over travel.

### **Belt Wash System**

- A. The belt filter press shall be equipped with an individual upper and lower belt wash station which shall clean the full width of the belts

after the sludge cake has been discharged.

- B. The belt wash station shall consist of 14-gauge, 304 stainless housing, piping, wash bar/nozzle assembly and (4) urethane seals per wash box to prevent misting outside the wash box area. Each nozzle assembly shall be readily removable.
- C. The self-cleaning belt wash header assembly shall be 304 stainless steel and furnished with an external hand wheel that is mounted to a stainless steel cleaning brush, located inside the spray pipe. Turning of the hand wheel dislodges any solid particles from each spray nozzle, and flushes the solid particles into the drainage system. Nozzle spacing and spray pattern shall be such that the sprays from adjacent nozzles overlap one another at the belt surface.
- D. The belt wash system shall be suitable for use with plant effluent water furnished to the press belt wash stations at no less than 20 psi. The wash water boost pump shall provide a minimum line pressure of 110 psig and a total water demand of both wash station combined of 40 gpm.

### **Scraper (Doctor) Discharge Blades**

- A. The belt filter press shall be provided with two adjustable pressure discharge scraper blades, to remove the dewatered cake sludge from the belts at the discharge end of the press. All mountings and supports for the discharge blades shall be 304 stainless steel.
- B. The discharge blades shall be reversible, beveled, replaceable, and shall be manufactured of UHMW polyethylene.
- C. Each discharge blade assembly shall have provisions to easily adjust the force against the press belt and shall be designed to quickly and easily be positioned away from the belts for inspection and servicing.
- D. Discharge Chute: At the sludge cake discharge and mounted rigidly to the press frame a 12-gauge, 304 stainless steel discharge chute shall deflect the cake solids away from the press, at an angle of no less than 60° to prevent solids buildup on the chute itself. This shut shall be removable to facilitate the use of a conveyor that is to be provided by the BFP manufacturer.

## **Belt Drive System**

- A. The belt filter press shall be provided with a belt drive system consisting of a rubber covered drive roll for each belt, a common 5HP, A.C. shaft mounted gear drive motor common to both belts. The motor assembly shall be completely sealed, electrically variable speed controlled, mounted as one assembly and rated for wash down service as a minimum requirement. Chain and sprocket systems shall not be acceptable for this specification.
- B. The drive assembly shall consist of shaft-mounted, right angle, helical type gear reducer, suitable for wet environments, a minimum service factor of 1.6, an integrally mounted energy efficient motor and a panel mounted variable frequency drive for belt speed adjustment. The belt speed range shall be adjustable over a range of 5 to 30 feet per minute. The Gear motor shall be SEW Eurodrive or Equal, Worm gear reducers are not acceptable for this specification.
- C. The standard shaft mounted reducer attached to the drive roll of the belt filter press shall be secured to the drive shaft by shrink disc. Equal diameter spur gears on the opposite ends of the drive rolls shall power the second drive roll and shall synchronize drive roll operation. Reducers using set-screws or drive systems using chain drives shall not be acceptable for this specification.
- D. Drive rollers shall be constructed as specified under "Rollers" and shall be surfaced with a minimum of 1/4 inch of Buna-N rubber coating (Shore A hardness 70-90) to permit maximum slip-free transmission of driving torque to the belt.

## Electrical Control Panels (General)

- A. All electrical control panels shall be mounted on the Skid and furnished with the belt filter press to control the belt press functions and those of related ancillary equipment specified herein. The panel shall be preassembled and pre-wired and shall include all controls necessary for automatic, semi-automatic and manual system operations. The panel shall be suitably wired for connection to a 480 volt, 3 phase, 60 Hertz power source. SCADA outputs shall be provided that are compatible with the plant SCADA system.
- B. The enclosures shall be Stainless Steel with foam in place memory retaining door gasket material, maintaining a NEMA 4X (IP66) rating. All door hardware is stainless steel. Molded Resin or Painted carbon steel enclosures are not acceptable.
- C. Control devices mounted on the enclosures door shall be rated for and installed to maintain the NEMA 4X (IP66) rating and for safety all exposed terminals of door mounted devices shall be 24 VDC or less supplied from an isolated power supply. These components mounted on the panels shall be labeled with an engraved white tag with black letters. Letter height shall be 3/16 inch minimum.
- D. Wiring shall be accomplished in a neat and organized manner through PVC wire duct where practical and tied secured in position with nylon cable ties when not. For external connections all wiring shall be brought to a numbered terminal strip. All press mounted conduit shall be Sch 40 PVC and or nonmetallic liquid tight conduit.
- E. All electrical components shall be UL recognized and all wiring shall comply with the National Electrical Code.
- F. The main control panel and the air panel shall be mounted on the belt press Skid but not the BFP itself do to maintenance and cleaning interferences.
- G. The main control enclosure shall house a front mounted main disconnect, all motor starter, variable frequency controls, a programmable logic controller, interlocks, alarms, indicating lights and touch screen operator control panel required for operation of the belt filter press and ancillary equipment described in this specification section. The main control panel shall be easily accessible to the

operator from the walkway at the operating level.

- H. All equipment shall be completely checked out and hot tested prior to shipment. This shall include a test of all switches, lights, relays and other components. All safety devices shall be rechecked completely for operation, function and control prior to final clean up and packaging for shipment.

### **Pneumatic Control Panel**

- A. A panel mounted gauge and regulator shall be installed for each pneumatic device requiring it. Over pressure protection shall be installed on each pneumatic device that may cause severe machine damage if over pressurized.
- B. Control valves for steering and other pneumatic operated process control valves shall be manifold mounted in panel for trouble free operation in corrosive environments.
- C. A loss of air pressure switch shall be mounted in the main air supply line, shutting down and/or not allowing the system to run should air supply pressure not be a minimum operating pressure settings. This low supply pressure reading shall activate an alarm condition displayed at the main operator control panel.

### **Main Control Panel**

- A. Shall be wired 480 volts Three Phase 60 cycle unless otherwise noted. A step down transformer provides 120 v AC control power.
- B. Shall contain a master front mounted fused disconnect, rated 125% of full load current.
- C. Shall contain a red mushroom Emergency Stop button that provides

a means of quickly stopping all equipment controlled from this panel. This is accomplished by tripping the MCR (Master Control Relay) to turn off all out going control power which has to be manually reset.

- D. Shall contain a power indicator pilot lamp. This indicates the MCR is on.
- E. Shall contain a flush green master start button. This activates the MCR.
- F. All operators and pilot lamps shall be 30.5 mm NEMA style rated at least NEMA 4 (IP66) water and oil tight. Contacts are self-cleaning and rated at least one million cycles.
- G. Motor control is provided by properly sized IEC self-protecting starters, and fused VFD's, s per each device required.
- H. Control and monitoring is provided through a PLC in conjunction with a 10" touch screen display and a remote multi-function operator station (mounted on BFP) and pneumatic control panel.
- I. The PLC shall be an Allen Bradley MicroLogix 1400 programmable logic controller, capable of controlling the required functions of the entire Belt Filter Press System and Ancillary Equipment.
- J. The PLC shall be provided with an Ethernet connection so that the manufacturer's technicians can support the owner by remote troubleshooting and PLC programming and/or owners SCADA connection. This shall be compatible with the Plant SCADA system and have outputs to this system.
- K. The Operator Controls and display shall be accomplished by a 10" color touch screen, mounted in the door of the main control panel. As a minimum, the following control functions shall be located on the touch screen:
  - Auto Manual selection
  - Hand Mode Indicator
  - Auto Mode Indicator
  - System Auto Start
  - System Shut down
  - Alarm Silence
  - Alarm Fault Reset
  - Pre-wash Indicator
  - Post-wash Indicator
  - Discharge Conveyor Start
  - Discharge Conveyor

- Stop
- Discharge Conveyor Running Indicator
- Pre-wash Timer Adjustment
- Post-wash Timer Adjustment
- Feed high Timer
- Low Polymer Water Fault Timer
- Low Washwater Timer
- Feed Stop Fault Timer

L. All Fault and Alarms shall be annunciated by an audible horn, displayed and logged by the touch screen. The following alarms shall be required:

- Belt Misalignment Right
- Belt Misalignment Left
- Upper Belt Breakage
- Low Belt Breakage
- Safety Cable Tripped
- Low Air Pressure
- Low Wash Water Pressure
- Low Polymer Water Pressure
- Feed High or Feed High fault (user settable timer)
- Belt Drive Fault
- Sludge Drive Fault
- Conveyor Overload
- Wash Water Pump Over Load
- Air compressor Over Load



## **Belt Press Mounted Auxiliary Operator Controls**

- A. A remote multi-function operator station with 6 inch monochrome HMI shall be installed on BFP near the gravity zone. This control shall show all alarms. The Belt Press Remote shall be capable of performing the following functions:
- |  |                           |
|--|---------------------------|
| < System Start (Auto)                                | < Alarm Silence           |
| < System Stop (Auto)                                 | < Sludge Feed Hold        |
| < Belt Speed Adjustment                              | < System Timer Adjustment |
| < Sludge Pump Speed Adjustment                       | < Polymer Feed Adjustment |
| < Sludge Flow in GPM (If equipped with a flow meter) |                           |
- B. The Belt Press mounted remote unit shall be capable of operating the Belt Press and all Ancillary equipment in the Automatic Mode in the event of Touch Screen Failure or Damage.

## **Variable Frequency Drives**

The supplier shall deliver drive units installed in the master control that meet the functional requirements associated with each motor involved with process control. Motor and drive unit selection shall be based upon the operating profile of the machine, with particular attention given to the limits of motor performance when operated at less than full speed with a VFD.

The drive unit shall have the following protection features:

1. Over Voltage
2. Under Voltage
3. Inverter Over Temperature
4. Motor Overload
5. Ground Fault
6. Motor Locked Rotor

The drive units shall be supplied 480 VAC through a suitably sized contactor that shall de-energize the VFD's when the Emergency Stop or Safety Cable are used.

The VFD's shall be Allen Bradley PowerFlex 4 or equal.

The drive unit shall be UL listed.



## Sequence of Operation

Automatic operations:

- A. Automatic Mode: the Belt Press Systems is to be operated in automatic mode by placing all equipment auto manual selector switch in auto. The auto mode indicator illuminates and the operator can then press the system start, pushbutton.
  - B. The discharge conveyor, Belt Press, and Wash Water Pump will now start automatically and run for a predetermined time. Belt Press pre-wash light will be illuminated during this time.
  - C. The belt pressing indicator will illuminate after the belt pre-wash cycle time times out. The sludge feed pump and polymer pump will start. The operator can adjust the speeds and feeds off the system at any given time.
  - D. Using the auto shut down push button will place the system in post wash mode, shutting down the sludge feed and polymer system. The post wash indicator will illuminate and clean the belts for a predetermined amount of time, then shut down the rest of the system.
  - E. Air compressor runs automatically when the MCR is active.
  - F. Manual Mode: Place appropriate auto/manual selector switches in manual. The Manual indicator shall then illuminate. The Operator can then start and stop equipment by the appropriate start/stop buttons. This mode is primarily for clean- up, maintenance, and trouble shooting.
- Manual functions shall allow running equipment without interlocks for maintenance and cleaning functions.

## Elevated Operator Walkway(s)

- A. The belt press manufacturer shall provide two (2) 24 inch wide X 60" long, Stainless Steel (or approved equal) construction, and elevated operator walkway for viewing and adjustment of the gravity deck operation.

- B. The walkways shall be cantilevered and easily removable from the belt press frame if need be to allow service. No external legs to the floor shall be required.
- C. The walkway surface shall be slip resistant 304 SS "Grip Strut" grating (or approved equal).
- D. Removable Stainless Steel Handrails with toe kick plate shall be provided.
- E. Access to the walkway shall be provided by the manufacturer via Stainless Steel inclined ladder or 304SS Grip Strut surface steps (or approved equal).

### **Spare Parts**

- A. The following spare parts shall be furnished for each belt filter press, properly packaged and labeled for storage:
  - One (1) Set of Dewatering Belts
  - One (1) Set of Containment Seals
  - One (1) Set of Wash Box Seals
  - One (1) Belt Steering Sensor

## Sludge Conditioning System

### A. General:

1. Belt filter press shall be provided with a sludge conditioning system, designed to efficiently mix polymer with the sludge and to adequately flocculate the sludge, for optimum dewatering.
2. The sludge conditioning system shall be mounted upstream of the press and shall consist of a flow splitting manifold, a four port vortex polymer injection ring and an in-line, non-clog, pneumatic variable orifice mixer. Polymer addition systems which utilize tanks with mixers or inject polymer directly into the sludge line are not an acceptable equal to the system specified due to the excess amounts of polymer required by these inefficient systems.
3. The sludge conditioning system shall be placed after the sludge pump discharge port prior to the sludge retention manifold provided. A minimum of 15 seconds at the specified flow, shall be allowed for the polymer and sludge to form an adequate floc before entering the gravity drainage area of the belt filter press.

### B. Performance:

1. The polymer and sludge shall be instantly mixed (less than 1.0 second at 60 GPM).
2. The mixing energy shall be pneumatically adjustable during operation from the pneumatic control panel regardless of the location of the mixing device.
3. The variable orifice mixer shall accommodate typical screened WWTP sludge without clogging.
4. The variable orifice mixer shall be able to open to the full line size of the system if required.

### C. Construction: (Sludge conditioning system)

1. The four point polymer injection system shall include: Sch. 80 PVC flow splitting manifold, stainless steel check valves, nickel plated brass press-lock poly tube fittings, and ½" inch poly tube. The injection points shall be placed at four equal points around the diameter of the sludge pump adapter if provided with sludge pump or PVC 150 pound flange adapter if provided loose (or approved equal).

2. The pneumatic variable orifice mixer shall be cast iron bodied with Butyl replaceable sleeve that contacts the sludge or slurry. It shall be full port simple design with no moving mechanical parts. The body shall act as a built-in actuator using air pressure to restrict the sludge flow and creating a variable orifice mixer. The decreased diameter inside the Butyl sleeve created by air pressure will create a sudden increase velocity into the slower moving sludge ahead creating ideal mixing turbulence that is completely adjustable at any time to any intensity at a moments notice by the operator.

D. Controls:

1. Controls shall be provided in the belt press pneumatic panel. They shall include: 304 stainless steel, 0 – 30 PSI liquid filled gauge, and 0 – 30 precision regulator.
2. The increase of air pressure shall increase the amount of mixing.

E. Mounting:

1. Skid systems: Shall be pre mounted plumbed on belt filter skid. The cast iron body of the variable orifice mixer shall be adequately supported so that it does not stress the sludge pump or PVC piping.
2. It shall be the responsibility of the contractor for the proper mounting, support, and plumbing, if the location is different than specified as above.

### **Sludge Retention Manifold and Piping**

A. General:

1. After the polymer and sludge has been mixed in the sludge conditioning system the sludge retention manifold shall provide adequate aging time for the sludge and polymer to produce a suitable floc.

B. Performance:

1. The sludge retention manifold shall provide a minimum retention time of 30 seconds at a 115 GPM flow rate. Use of tanks to provide retention time of the sludge/polymer is not acceptable with this specification.

C. Construction:

1. All piping shall be a minimum of schedule 80 PVC, with all valves and shall be adequately designed and sized for the intended use.
2. The sludge retention manifold shall use schedule 80 PVC piping in a gentle winding "C" formation to minimize space requirements and provide the required retention time as specified.
3. The sludge retention manifold shall include cleanout plugs in every pipe

loop to aid in removing any sludge that may harden and cause blockages.

D. Mounting:

1. The sludge retention manifold shall be rigidly mounted to the belt filter press skid platform and provide for the sludge feed connection to the belt filter press.
2. It shall be the responsibility of the contractor for the proper mounting, and plumbing, if the location is different than specified as above.

**Air Compressor**

A. General:

1. System air shall be provided by a single stage air compressor for the purpose of supplying air to control the belt filter press.
2. Compressor shall be a heavy duty type Jenny, Devilbis, Ingersoll Rand or Equal.

B. Performance:

1. Compressor shall be sized to supply all air for press operation at peak demand.

C. Compressor Construction:

1. Compressor shall be industrial type with cast iron pump finned casting. Pump shall be splash-lubricated.
2. Compressor shall be driven by industrial duty, 1 ½ hp A.C. induction motor sized for intended duty with a service factor of at least 1.15. Compressor and motor shall be mounted on a 30 gallon ASME rated receiver with pressure gauge and pressure regulator switch.

D. Controls:

1. The air compressor shall be controlled by the belt filter press system control panel (see belt filter press controls)
2. The compressor shall automatically run when needed while the master control relay is active.

E. Mounting:

1. The air compressor shall be pre wired, plumbed, and mounted on rubber isolation mounts to the belt filter press skid.
2. It shall be the responsibility of the contractor for the proper mounting, and plumbing, if the location is different than specified as above.

## **Polymer Feed/Blend System**

A. General:

1. The automatic emulsion polymer dilution/feed system shall consist of an integrated equipment package capable of automatically metering neat polymer and water into a hydrodynamic blending device, thus allowing the operator to adjust the dilution strength, and water rate, while activating the polymer solution. System relying on mechanical driven mixing devices shall not be acceptable for this specification.
2. At no time shall polymer be exposed to a mechanical impeller or other cause of excessive shear. System's which are "retention time dependent" - a system which is prone to induce insufficient or excessive mixing energy depending on flow rate and the subsequent retention time in the mixing chamber, or which utilize conventional static mixers shall not be considered. All components which require periodic maintenance shall be readily accessible.
3. The system shall include the following components:
  - Non-mechanical liquid polymer activation device
  - Neat polymer metering pump

- Neat polymer check valve
- Dilution water inlet manifold with flow control
- Low water pressure switch and solenoid valve
- NEMA 4X electrical panel with 4- 20 mA remote

B. Performance Requirements:

1. A non-mechanical hydrodynamic blending device specifically designed to dilute and activate emulsion, dispersion and solution type polymer with viscosities ranging from 200 to 75,000 cps. And active contents up to 75% shall be provided.
2. The liquid polymer activation mixing energy shall be staged such that it provides for high, non-damaging mixing energy over the full operating range of the system. The integral water control device, which shall also produce mixing energy by creating a pressure drop across its orifice, shall be constructed of brass and shall be designed to allow orifice replacement without disassemble of any other part of the system. The system shall be designed for use with either potable or non-potable dilution water. The type of dilution water used shall not affect the specified warranty in any way.
3. Provide diaphragm type neat polymer metering pump capable of viscous liquid. Pumps shall be Iwaki, LMI, Neptune or equal.

C. Polymer System Construction:

1. The polymer systems dilution components shall be provided pre-assembled in a 304ss semi enclosed cabinet. The cabinet shall be formed with the top and bottom securely welded in place. The cabinet shall be built in a way that it will be rigid enough to support the polymer system.
2. The dilution water inlet assembly shall include a 1" FNPT inlet fitting, an industrial duty differential pressure switch sensing loss of dilution water flow, NEMA 4X nickel plated brass dilution water solenoid valve, and stainless steel liquid filled dilution water inlet pressure gauge/with a 304 stainless steel diaphragm isolator. The anticipated dilution water supply pressure is 50-130 psi with a maximum of 300psi. Pressure switches with plastic construction and or fittings or mechanically actuated switches shall not be acceptable.
3. Dilution water shall be metered by a brass and 304 stainless steel fitted Acrylic Rotometer type flow meter/with flow control for both pre and post dilution. A neat polymer check valve specifically designed to isolate neat polymer from dilution water shall be placed after the Rotometers. The valve

shall be constructed of stainless steel, PVC and Viton. The valve shall be readily accessible for cleaning. Valves which are installed inside the mixing chamber or which require mixing chamber disassembly for servicing will not be accepted.

4. The non-mechanical hydrodynamic blending device shall be of brass and or PVC. It shall be readily accessible for cleaning and replacement if necessary.
5. The solution discharge assembly shall include 1" FNPT discharge fitting and include a stainless steel liquid filled pressure gauge with a 304 stainless steel diaphragm isolator.

#### D. Polymer Pump:

1. The polymer metering pump shall be a diaphragm type metering pump capable of high viscous liquid. The pump head shall be PVC with 316ss ball check and spring, PCTFE valve seat, PTFE diaphragm and PTFE gasket.
2. The drive unit shall be an electromechanical solenoid type pump that is electronically controlled by a 4-20mA remote signal by the belt press panel.
3. The pump shall be capable running 20% - 100% of its range without loss of performance.
4. The metering pumps suction assembly shall include ½" polypropylene tubing.

#### E. Controls:

1. The unit shall be integrated with the main touch screen control in the main belt press control panel. (See belt press controls)
2. On loss of dilution water flow the metering pump shall be placed on standby and shall automatically restart when flow is returned. A user settable timer will determine how long the system can operate without the dilution system.

#### F. Mounting:

1. This system shall be pre-wired and plumbed for its intended propose.

2. The polymer systems panel shall be mounted to the belt filter press skid next to the main control panel. The metering pump shall be mounted to the belt filter press skid next to the sludge pump
3. It shall be the responsibility of the contractor for the proper mounting, wiring and plumbing, if the location is different than specified as above.

G. Spare Parts:

- One (1) Service Kit for Polymer Pump

**Sludge Feed Pump**

A. GENERAL:

1. The pump shall be of the positive displacement, rotary lobe type designed to pump primary and secondary wastewater to 12% solids.
2. The pumps shall be of the positive displacement, rotary lobe type as manufactured by Boerger, or approved equal.
3. Each pump(s) shall be a complete unit, direct coupled to gear reducer and motor, and mounted to a common base plate.
4. Each pump(s) shall be sized for the intent use to provide adjustable and even feeding of the sludge stream to the press. Progressive cavity pumps are not acceptable for this specification.
5. Each pump(s) speed shall be able to be controlled from the main operator control panel as well as the press mounted multi station control panel.
6. All controls and motor protection shall be provided in the main belt press control panel.
7. Sludge feed pump(s) shall have a one year factory warranty as standard. The Pump(s) shall be warranted to be free from defects in workmanship, design and materials. If any part of the equipment should fail during the warranty period, it shall be replaced in the machine(s) and the unit(s) restored to service at no expense to the OWNER.

B. PERFORMANCE REQUIREMENTS:

1. Each pump provided shall be capable of supplying 200 GPM @ 15 PSI sludge flow rate. The pump shall be able to accomplish this without exceeding 350 RPM maximum speed, to ensure long operating life.
2. There shall be no significant change in vibration and noise level over the entire listed range of operating conditions of operating conditions of the pumping system.
3. A motor sizing shall provide a minimum of 25% reserve hp as evidenced by specific requirements at specified design condition on the certified performance curve.

### C. PUMP CONSTRUCTION:

The following pump construction specifications pertain to pump items.

#### ROTARY LOBE POSITIVE DISPLACEMENT PUMP

Pump casing	<p>In block-construction, pump casing from one piece only, made of cast iron ASTM A48, surface hard, protection plates at both faces, all wear parts changeable through the front cover without disassembly of any pipes or coupling / motor.</p> <p>Sandwich design pump casings held together by screw connections are not acceptable.</p>
Service	<p>The pump shall have Maintenance in Place liners which are serviced by opening the quick release cover with O-ring sealing. Normal maintenance of the sludge pump shall not require sludge piping removal.</p>
Bearings plug.	<p>One-side double bearings, oil bath in block casing, lateral drain</p>
Lobe-form	<p>Triple-lobe rotors, non-wetted cast iron core coated with abrasion-resistant Buna-N.</p>
Shafts	<p>Not wetted by pumped fluid, but oil lubricated.</p>
Shaft sealing	<p>Maintenance free single acting mechanical seals with standard oil quench for both seals, identical design, changeable through pump cover.</p>
Sealing control	<p>Oil filled intermediate chamber with lateral drain plug, for quenching and monitoring the seals and for lubricating the shaft/rotor-connections.</p>

#### D. SLUDGE DRIVE: (GEAR MOTOR)

1. The motor and gear box shall be suitable for wash down and severe duty for chemically aggressive and wet environments.
2. The motor shall be AC 230-460volt totally enclosed fan cooled (TEFC) in accordance with NEMA MG1-1.26.2 not more than 5Hp.
3. The motor supplied shall be specifically designed for inverter duty to allow for the use of variable frequency drives. The motor shall be part of the gear drive supplied by the manufacturer.
4. The gear motor shall be a parallel helical gear unit designed for continuous duty under difficult operating conditions, manufactured by SEW-Eurodrive or approved equal.
5. The helical gearing shall be manufactured in compliance with ANSI/AGMA Standard 2001-B88.
6. The gears shall be carburized to a hardness of 58 - 62 Rc for durability.
7. The gear case shall be high strength gray cast iron SAE Class 30, coated with stainless steel paint as a complete unit with motor for added corrosion protection.
8. The unit shall use a double-lip oil seal on output shaft with an additional inner seal made of Viton.

#### E. MOUNTING:

1. Each pump(s) shall be a complete unit, direct coupled to gear reducer and motor, and mounted to a common base plate.
2. The common base plate shall be designed to adequately support the pump and gear motor while providing cutouts and or notches for easy access for regular routine maintenances. At no time should the gear motor or pump need to be removed from the base plate for regular routine maintenance.
3. The common base plate shall be bolted to the skid deck of the belt filter press skid system if provided or bolted on site to adequate foundation if furnished as pieces.

#### F. SPARE PARTS TO BE FURNISHED

1. One (1) set of mechanical seals and o-rings for each pump.
2. One (1) Set of lobes and o-rings for each pump
3. One (1) Set of wear plates for each pump

### **Sludge flow meter**

#### A. GENERAL:

1. Each sludge feed system shall provide an in-line electromagnetic flowmeter manufactured by Foxboro corporation, or approved equal. Meters that use probes or paddle wheels that protrude into the sludge flow are not acceptable.
2. The sludge flowmeter shall be of rugged construction, rated for wet corrosive environments and sized adequately not to restrict sludge flow or sludge conditioning.

**B. PERFORMANCE REQUIREMENTS:**

1. The sludge flowmeter function shall not be effected by uneven flow or affected by low-frequency noise (slurry noise).
2. The flowmeters detector tube shall be highly resistant to abrasive fluid.

**C. FLOWMETER CONSTRUCTION:**

1. The entire unit shall be NEMA 4X (IP67) watertight rated.

**D. CONTROLS:**

1. The unit shall be integrated with the main touch screen control in the main belt press control panel. The controls shall be as follows:
  - Master non reset-able gallon counter
  - Reset able gallon counter
  - GPM indicator
  - Fault indication
2. Fault indication shall be as follows by light indicator displayed on touch screen:
  - Pipe Empty Alarm

**E. MOUNTING:**

1. The sludge flowmeter shall be wafer type, for mounting between two ANSI class 150 pound flanges.
2. The sludge flowmeter shall be mounted and pre-wired to Belt Filter Press main skid if provided.
3. It shall be the responsibility of the contractor for the proper mounting, wiring and plumbing, if the location is different than specified as above.

## **Wash Water Booster Pump**

**A. GENERAL:**

1. Each wash water booster pump shall be close coupled, single-stage, centrifugal pump manufactured by, Goulds, Deming, Burks or approved equal.

2. The wash water booster pump shall be of rugged construction, rated for wet corrosive environments and sized adequately to keep the belts clean.

**B. PERFORMANCE REQUIREMENTS:**

1. Shall be able to boost Plant effluent water supplied at 20 psi at 60 GPM to 110psi min to the belt wash stations.
2. The belt wash water booster pump shall be capable of abrasive dirty water up to ¼" solids.

**C. PUMPS CONSTRUCTION:**

1. The pumps head casing shall be ductile iron base coat with epoxy and finish coat of urethane
2. The Impeller shall be ductile iron with bronze wear ring and internally hydraulically balanced for improved bearing life.
3. The mechanical seal shall constructed with a carbon ceramic face.
4. The entire assemble shall be bolted on a JP shaft AC induction type motor, 480 v, 60 Hz, 3 phase, TEFC with a minimum service factor of 1.15.

**D. CONTROLS:**

The unit shall be integrated with the main touch screen control in the main belt press control panel. (See belt press controls)

**E. MOUNTING:**

1. The pump and motor assembly shall be mounted to an adapter plate that properly supports the motor and pump head and allows the use of rubber isolation mounts when mounted directly to the belt filter skid. The pump shall be pre-plumbed and wired for its intended use.
2. It shall be the responsibility of the contractor for the proper mounting, wiring and plumbing, if the location is different than specified as above.

## **Skid Assembly**

**A. GENERAL:**

1. All items listed in specifications shall be mounted, plumbed and pre-wired on one common skid.
2. The skid shall contain one main filtrate sump, manufactured of 12-gauge, stainless steel, mounting area for all components and walkways allowing the operator access to both sides of the belt filter press.
3. The skid shall incorporate two (2) 24"W X 60" L removable operator walkways that shall allow the operator to access the belt press mounted upper walkways via inclined ladder type steps. These shall be easily removable for shipment. The complete skid assembly shall not exceed the 102" legal road width with the walkways removed and/or folded up for shipment. Removable stainless steel handrails shall be provided by the manufacturer for these

walkways.

4. It shall be the responsibility of the contractor to provide steps to access the skid operating platform.

**B. PERFORMANCE REQUIREMENTS:**

1. The skid when fully assembled with all list ancillary equipment, plumbing and wiring shall allow the operator to safely operate the system from the supplied skid platform, without the requirements of any additional steps or ladders.
2. The structural frame shall allow for lifting of the fully assembled system without causing any deflections that may damage or deter the operation of the equipment and components mounted to the skid frame.

**C. SKID CONSTRUCTION:**

1. The skid shall be designed with structural members conforming to standard specifications for structural steel, ASTM A36. The maximum deflection of each structural member shall not exceed  $L/450$ , where L is the span length.
2. After fabrication, the structural steel frame shall be sandblasted according to SSPC SP-10 standards to a near white finish, zinc epoxy coated with a minimum of 8 mils.

**D. CONTROLS:**

1. Belt filter press controls shall be mounted to the skid frame.

**E. MOUNTING:**

1. The skid shall provide feet pads for designated concrete pier supports.

**Conveyor**

**A. GENERAL:**

1. A sludge cake conveyor shall be provided to convey the cake away from the belt filter press.
2. The conveyor shall be a V-trough type, having a overall belt width of 18 inches and an overall length of 22' feet.

**B. PERFORMANCE REQUIREMENTS:**

1. The conveyor shall be capable of keeping up with the peak output of the belt filter press system without over loading the belt.

**C. CONVEYOR CONSTRUCTION:**

1. The frame and supports shall be fabricated from stainless steel plate and structural shapes (or approved equal), providing rigid support for all components and sludge loadings
2. All conveyor bearings shall be cast pillow blocks.

3. The conveyor shall have incoming collection chute to collect sludge cake being discharged from the belt filter press.
4. The belt shall be properly supported on both sides and have a stainless steel hinged splice for connection.
5. Belt conveyor drive shall be a shaft mounted helical reducer with a minimum service factor of 1.5, AC drive motor with a minimum service factor of 1.15, and mounted to the reducer.

**D. CONTROLS:**

1. Shall be provided by the belt filter press system main touch screen control.  
(See Belt Filter Press Controls)

E. These controls shall be start and stop.

**MOUNTING:**

1. The conveyor shall be mounted to belt press skid by a pivot pin through to tail section of the conveyor allowing the conveyor to be mounted for right hand or left hand discharge.
2. The discharge end of the conveyor shall be provided with legs for support to the ground (blocks, concrete piers, or retaining wall)
3. It shall be the responsibility of the contractor for the proper mounting if the location is different than specified as above.

**F. OPTIONAL ACCESSORIES**

1. Top Side Belt Seal Assembly (helps keep sludge from rolling off outside the belt)
2. Stainless Steel Belly Pan Assembly (or approved equal)

**MANUFACTURER'S SERVICES**

**Start-up and Operator Training**

Services of the manufacturer's factory trained representative, who is specifically knowledgeable in the type of equipment specified herein, shall be provided during the equipment installation period. Upon complete installation of equipment by installing contractor, including placement of equipment, setting and leveling the equipment, piping and electrical connections to all the equipment specified herein, the manufacturer's service representative will approve the installation and begin start up and training.

Upon approval of the installation, the services of the manufacturer's factory trained representative shall be provided at the project site for equipment start-up and calibration. During the start-up and calibration phase the manufacturer's representative shall inspect all system components for proper connection and alignment and assist the installation contractor in placing the equipment in a proper operating condition.

Upon satisfactory completion of the start-up and calibration, a representative of the

manufacturer shall be provided to instruct Owner's personnel in the proper operation and maintenance of the equipment. The manufacturer's representative who will be providing the instruction shall have prior operation, maintenance and instructing experience acceptable to the Engineer.

<u>Period</u>	<u>Number of 8 hour days</u>
Inspection / Start Up / Calibration	4
Operator Training	1

**END OF SECTION**

**BID SCHEDULE**

**Town of Florence**

**Skid Mounted 1.5 Meter Belt Filter Press**

<b>Number</b>	<b>Description</b>	<b>Lump Sum</b>
<b>1</b>	<b>Skid Mounted 1.5 Meter Belt Filter Press</b>	
<b>2</b>	<b>Conveyor</b>	
<b>3</b>	<b>Bonding, Taxes, Insurance</b>	
	<b>Total Base Bid</b>	

Bid in Words:

\_\_\_\_\_ Dollars  
\_\_\_\_\_ Cents

In evaluating Bids, discrepancies in the multiplication of units of work and unit prices will be resolved in favor of unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in factor of the correct sum.

Bidders are required to fill in all blank spaces with an entry. Bids submitted with blank spaces may be considered "Non-Responsive".

Quantities shown in this bid schedule are approximate only, and are used for the purpose of bid comparison.

In submitting this Bid, it is understood that the right to reject any and all Bids and or award portions of the work as determined to be in the best interests of the Town and to waive irregularities in the Bidding has been reserved by THE TOWN.

The undersigned hereby certifies that the information submitted herewith, including any attachment is true to the best of his knowledge and belief.

Seal: (if bid is by Corporation

Respectfully Submitted:

Bidder: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

License No. \_\_\_\_\_

Address: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

**TOWN OF FLORENCE, ARIZONA**

**PURCHASE ORDER TERMS AND CONDITIONS**

1. These Purchase Order Terms and Conditions (the “Terms” or “contract”) shall be the general contract conditions applicable to any purchase or offer to buy products or services by the Town pursuant to a Purchase Order and are incorporated therein. These Terms shall be fully binding upon the Vendor and its employees, agents, representatives, successors and assigns. The Vendor agrees, certifies, and warrants the Town of its full compliance with the Terms. The Town and the Vendor may be referred to in this contract collectively as the “parties” and each individually as a “party”.
2. This contract is subject to cancellation by the Town pursuant to Arizona Revised Statutes (“A.R.S.”), section 38-511, the provisions of which are incorporated herein by reference.
3. The Vendor shall provide the “Goods” and/or “Services” as described in the Town’s Purchase Order provided to the Vendor.
4. All Goods received by the Town are subject to inspection, testing and acceptance by the Town to determine compliance with any requirements for the Goods. Acceptance takes place when the Town agrees with the Vendor that the terms and conditions of the contract have been met and verified. Acceptance is not the same as receipt, and can only occur after intact shipping, inspection by the Town, and any onsite testing that has been stipulated as part of the Purchase Order. Inspection, approval and acceptance by the Town shall not relieve the Vendor of any liability for defective, non-conforming or inadequate Goods provided pursuant to this contract. Goods failing to meet to meet the requirements of this contract and the Town’s Purchase Order will be held at Vendor’s risk and may be returned to the Vendor. If so returned, the cost of transportation, unpacking, inspection, repacking, reshipping, or other like expenses are the responsibility of the Vendor. The Town may elect to do any or all of the following: waive the non-conformance; stop the work or delivery immediately; or bring the Goods into compliance at the Vendor’s sole expense.
5. All Goods must: (a) meet or exceed the specifications and requirements of the Town’s specifications and Purchase Order; (b) Be new, unused, and not refurbished; (c) Be designed and constructed using current industry accepted engineering and safety practices, and materials; (d) Be fit for the intended purposes for which the Goods are used; (e) Be available for inspection at any time prior to or after procurement; (f) Conform to the written promises or affirmations of fact made by the Vendor; (g) Include any and all accessories which may or may not be specifically mentioned herein, but which are normally furnished or which are necessary to make a delivered product ready for its intended use. Such accessories shall be assembled, installed and adjusted such that the product is ready for continuous operation at the time of delivery; (h) Have assemblies, sub-assemblies and component parts that are standard and interchangeable throughout the entire quantity of a particular product as may be purchased simultaneously by the Town; (i) Not be a prototype insofar as the general design, operation and performance. This requirement is not meant to preclude Vendor from offering new models or configurations, which incorporate improvements in a current design or add functionality, but which in such new model or configuration may be new to the marketplace; and (j) Include at least one copy of a safety and operating

manual. The cost of any such manuals shall be included in the base price for any product delivered hereunder. If more detailed and technically oriented parts and maintenance manuals are available for a product, at a cost, they shall be offered by the Vendor to the Town.

6. Title to Goods, and responsibility and liability for loss, and/or damage in shipping pass to the Town at the delivery destination after receipt, approval and acceptance have taken place. Vendor shall be responsible for delivery and acceptance according to the requirements of this contract and the Purchase Order. The execution of all required tests, certifications and/or licensing, and costs thereof, shall be the responsibility of the Vendor. Upon request by the Town, the Vendor shall provide any documentation or certification related to such tests, certifications or licensing.
7. All defective Goods shall be replaced and exchanged by the Vendor. The cost of transportation, unpacking, inspection, repacking, reshipping or other like expenses shall be paid by the Vendor. All replacement Goods must be received by the Town within seven (7) business days of initial notification.
8. The Vendor shall be responsible for, and shall and hereby does warrant that all Goods provided shall: (a) be new; (b) be of good quality and manufacture; (c) conform to the requirements of the contract and specific Purchase Order (including all applicable descriptions, specifications, drawings and samples); (d) be free from defects in material, workmanship, or design; (e) be fit for the intended purpose; (f) meet or exceed all specifications, requirements and legal regulations, statutes and/or codes that apply thereto, including, without limitation, all federal, state, county and Town rules, regulations, ordinances and/or codes that may apply; and (g) be fully covered by Vendor's and manufacturers' warranties applicable to the Goods running in favor of the Town.
9. Copies of all applicable manufacturers' warranties shall be delivered to the Town with or before delivery of the Goods to the Town. The Town may at any time require the Vendor to deliver to the Finance Director written warranties from the Vendor and/or the manufacturers of the Goods for review and approval by the Town. These warranties shall be in a form and content satisfactory to the Town, the Town's lender(s), if any, and any other person reasonably requested by the Town, or the Town's lender(s). If the Vendor fails to deliver such warranties, or if the warranties are determined by the Finance Director to be inadequate or unacceptable, the Vendor shall be considered to be in material breach of this contract.
10. Immediately upon notice from the Finance Director thereof, the Vendor shall correct or replace as required by the Finance Director, at the Vendor's expense, all defects, noncompliance, or inadequacies which may be discovered in any of the Goods. The Town's acceptance or approval of the Goods shall in no way relieve the Vendor of any of the Vendor's responsibilities hereunder. Unless a longer period is provided in the Purchase Order, the Vendor's or manufacturers' written warranties, and this obligation to correct or replace, shall continue for a period of two (2) years after acceptance of the Goods. The warranties shall begin on the date of acceptance of the Goods by the Town, during which, the Vendor shall replace or repair defective Goods, at no expense to the Town.

11. The following requirements shall apply to all Goods: (a) Any warranties offered by a dealer shall be in addition to the manufacturer's standard warranty, and shall not be a substitute for such. The Vendor's base price for any Goods shall be inclusive of the standard warranty. The warranties set forth in this contract are not affected by inspection or testing of or payment for the Goods by the Town; (b) The Vendor shall be responsible for the execution and effectiveness of all product warranties, and shall be the sole source for solution, to problems arising from warranty claims. The Vendor agrees to respond directly to correct warranty claims and to ensure reconciliation of warranty claims that have been assigned to a third party; (c) The Vendor shall provide detailed parts and labor warranty information. If the Vendor submits a warranty which does not meet the minimum requirements herein, the Vendor agrees that such warranty shall be considered to be amended to meet those minimums; and (d) the Vendor must be properly franchised dealer authorized to sell and service, including warranty, service, all products offered and sold under this contract and the Town's Purchase Order.
12. The Vendor shall be responsible for and shall and hereby does warrant that all Services provided shall: (a) be of good quality; (b) be provided by properly trained, qualified, and licensed (where applicable) workers and/or subcontractors; (c) conform to the requirements of this contract and the Purchase Order (including all applicable descriptions, specifications, drawings and samples); (d) be appropriate for the intended purpose; (e) meet or exceed all specifications, requirements and legal regulations, statutes and/or codes that apply thereto, including, without limitation, all federal, state, county and Town rules, regulations, ordinances and/or codes that may apply; and (f) be fully covered by Vendor's warranties running in favor of the Town under this contract.
13. To the fullest extent permitted by law, the Vendor shall defend, indemnify, pay, save and hold harmless the Town, its Mayor and council members, officials, agents representatives, volunteers and employees (collectively "Indemnitees") from and against any and all damages, claims, losses, liabilities, actions or expenses (including, but not limited to, attorney's fees, court costs, the costs of expert witnesses, transportation, lodging and meal costs of the parties and witnesses, cost of transcript preparation and other reasonable and necessary direct and incidental costs of such dispute, and the cost of appellate proceedings) (collectively, "Claims") relating to, arising out of or alleged to have resulted from the Goods, Services and/or Vendor's performance (or lack thereof) pursuant to this contract and the Purchase Order. The Vendor's duty to defend, pay, hold harmless and indemnify Indemnitees pursuant to this section shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, including death, or to injury to, impairment, or destruction of property including loss of use resulting therefrom, caused in whole or in part by the Goods, acts, errors, mistakes, omissions, work or Services of the Vendor or anyone for whose acts the Vendor may be legally liable. It is the specific intention of the parties that the Indemnitees shall be indemnified by Vendor from and against all Claims other than those arising from the Indemnitees' sole negligence. The Vendor shall be responsible for primary loss investigation and defense and judgment costs where this Indemnification applies. In the event that any action or proceeding shall at any time be brought against any of the Indemnitees by reason of any Claim referred to in this section, the Vendor, at the Vendor's sole cost and upon at least ten (10) days' written notice from the Town, shall defend the same with counsel acceptable to the Town, in the Town's sole discretion. The foregoing indemnity obligations of the Vendor shall survive the expiration or termination of this contract for six (6) years and then expire.

14. This contract constitutes the entire understanding of the parties and supersedes all previous representations, written or oral, with respect to the Goods or Services specified herein. This contract may not be modified or amended except by a written document, signed by authorized representatives for each party.
15. The Vendor shall, without additional expense to the Town, be responsible for obtaining any necessary licenses and permits and for complying with any applicable Federal, State, County and Municipal laws, codes and regulations in connection with the execution of the Services and provision of Goods.
16. All warranties and representations by the Vendor shall survive the completion, expiration or termination of this contract.
17. This contract shall be governed by and construed in accordance with the substantive laws of the State of Arizona, without reference to conflict of laws and principles. Any action brought to interpret, enforce or construe any provision of this contract shall be commenced and maintained in the Superior Court of the State of Arizona in and for the County of Pinal (or, as may be appropriate, in the Justice Courts of Pinal County, Arizona or in the United States District Court for the District of Arizona, if but only if, the Superior Court lacks or declines jurisdiction over such action). The parties irrevocably consent to jurisdiction and venue in such courts for such purposes and agree not to seek transfer or removal of any action commenced in accordance with the terms of this paragraph.
18. The Vendor shall be solely responsible for any and all tax obligations which may result out of the Vendor's performance of this contract. The Town shall have no obligation to pay any amounts for taxes, of any type, incurred by the Vendor.
19. This contract may be executed in one or more counterparts, and each originally executed duplicate counterpart of this contract shall be deemed to possess the full force and effect of the original, but all of which together shall constitute one and the same instrument, binding on the parties. The parties agree that this contract may be transmitted between them via facsimile or so called "PDF" signature. The parties intend that faxed or "PDF" signatures constitute original signatures and that a fully collated agreement containing the signatures (original, faxed or PDF) of the parties is binding upon the parties.
20. Any amendment, modification or variation from the provisions of this contract shall be in writing and signed by all parties hereto.
21. In the event either party brings any action for any relief, declaratory or otherwise, arising out of this contract, or on account of any breach or default hereof, the prevailing party shall be entitled to receive from the other party reasonable attorneys' fees and reasonable costs and expenses (including, but not limited to, attorney's fees, court costs, the costs of expert witnesses, transportation, lodging and meal costs of the parties and witnesses, cost of transcript preparation and other reasonable and necessary direct and incidental costs of such dispute, and the cost of appellate proceedings), determined by the arbitrator or court sitting without a jury, which fees shall be deemed to have accrued on the commencement of such action and shall be enforced whether or not such action is prosecuted through judgment.

22. The terms and provisions of this contract represent the results of negotiations between the parties, each of which has been or has had the opportunity to be represented by counsel of its own choosing, and neither of which has acted under any duress or compulsion, whether legal, economic or otherwise. Consequently, the terms and provisions of this contract shall be interpreted and construed in accordance with their usual and customary meanings, and the parties each hereby waive the application of any rule of law which would otherwise be applicable in connection with the interpretation and construction of this contract that ambiguous or conflicting terms or provisions contained in this contract shall be interpreted or construed against the party whose attorney prepared the executed contract or any earlier draft of the same.
23. If the terms of this contract or provision of Services or Goods hereunder extends beyond the current fiscal period of the Town and the Town Council does not appropriate funds to continue this contract and pay for charges or Goods hereunder, the Town may terminate this contract at the end of the current fiscal period.
24. The Town has the right to terminate, suspend or abandon this contract for cause or convenience, or to terminate any portion of the Services which have not been performed by the Vendor. The Town may terminate this contract, or any part thereof, for its sole convenience, at any time without penalty or recourse. The Vendor shall receive payment for Services satisfactorily completed and accepted by the Town, as determined by Town in its reasonable discretion.
25. If the Vendor is providing Services, the Vendor acknowledges and agrees that, without limiting any obligations or liabilities of the Vendor, the Vendor shall purchase and maintain, at its own expense, hereinafter stipulated minimum insurance with insurance companies duly licensed by the State of Arizona (admitted insurer) with an AM Best, Inc. rating of B ++ 6 or above or an equivalent qualified unlicensed insurer by the State of Arizona (non-admitted insurer) with policies and forms satisfactory to the Town of Florence. Failure to maintain insurance as specified may result in termination of this contract at the Town's option. The Vendor is primarily responsible for the risk management if its work under this contract, including but not limited to obtaining and maintaining the required insurance and establishing and maintaining a reasonable risk control and safety program. The Town reserves the right to amend the requirements herein at any time during the contract. The Vendor shall require any and all subcontractors to maintain insurance as required herein naming the Town and Vendor as "Additional Insured" on all insurance policies, except Worker's Compensation, and this shall be reflected on the Certificate of Insurance and Endorsements. The Vendor's insurance coverage shall be primary insurance with respect to all available sources. Coverage provided by the Vendor shall not be limited to the liability assumed under the Indemnification provision of this contract. To the extent permitted by law, Vendor waives all rights of subrogation or similar rights against Town, its representatives, agents, and employees. All insurance policies, except Workers' Compensation, required by this contract, and self-insured retention or deductible portions, shall name, to the fullest extent permitted by law for claims arising out of performance of this contract, the Town of Florence, its Mayor and Council members, agents, representatives, officers,

volunteers, officials and employees as Additional Insureds and shall specify that any insurance coverage carried or self-insurance by the Town, any department or employee shall be excess coverage and not contributory insurance to that provided by the Vendor. Said policy shall contain a severability of interest provision. The Town reserves the right to continue payment of premium for which reimbursement shall be deducted from amounts due or subsequently due the Vendor. The Town reserves the right to require complete copies of all insurance policies and endorsements required by this contract at any time. Failure to maintain the insurance policies as required by this contract, or to provide evidence of renewal, is a material breach of the agreement.

By requiring insurance herein, the Town does not represent that coverage and limits will be adequate to protect the Vendor. The Town reserves the right to review any and all of the insurance policies and/or endorsements cited in this contract, but the Town has no obligation to do so. Failure to demand such evidence of full compliance with the insurance requirements set forth in this contract or failure to identify any insurance deficiency shall not relieve the Vendor from, nor be construed or deemed a waiver of, its obligation to maintain the required insurance at all times during the performance of this contract.

All insurance required herein shall be maintained in full force and effect until all work or services required to be performed under the terms of this contract is satisfactorily performed, completed and formally accepted by the Town, unless specified otherwise in this contract.

The policies set forth in these requirements may provide coverage which contain deductibles or self-insured retention amounts. Such deductibles or self-insured retention shall not be applicable with respect to the policy limits provided to the Town of Florence. The Vendor shall be solely responsible for any such deductible or self-insured retention amount. The Town, at its option, may require the Vendor to secure payment of such deductible or self-insured retention by a surety bond or irrevocable and unconditional Letter of Credit.

If any work under this contract is sub-contracted in any way, the Vendor shall execute written agreement with subcontractor containing the same Indemnification Clause and Insurance Requirements set forth herein protecting the Town of Florence and the Vendor. The Vendor shall be responsible for executing the agreement with subcontractor and obtaining Certificates of Insurance and Endorsements verifying the insurance requirements.

Prior to commencing any Services under this contract, the Vendor shall furnish the Finance Director with Certificate(s) of Insurance, and formal endorsements as required by this contract, issued by the Vendor's insurer(s) as evidence that policies are placed with acceptable insurers as specified herein and provide the required coverage's,

conditions, and limits of coverage and that such coverage and provisions are in full force and effect.

The Vendor shall maintain "occurrence" form Commercial General Liability insurance with a limit of not less than \$1,000,000 for each occurrence, \$2,000,000 Products and Completed Operations Annual Aggregate, and \$2,000,000 General Aggregate Limit. The policy shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury. Coverage under the policy will be at least as broad as insurance limited to, separation of insureds clause. If any Excess insurance is utilized to fulfill the requirements of this section, such Excess insurance shall be "follow form" equal or broader to coverage scope then underlying.

The Vendor shall maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of the Vendor's employees engaged in the performance of Services under this contract and shall also maintain Employers Liability Insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee and \$250,000 disease policy limit.

Auto Liability limits of not less than \$1,000,000 each accident, combined Bodily Injury and Property Damage Liability insurance. Certificate and Endorsement to reflect coverage for "Any Auto" or "All Owned, Scheduled, Hired and Non-Owned".

Errors & Omissions Liability: Coverage Amount: \$1,000,000 per occurrence/aggregate, unless higher coverage limits are required under the original solicitation documents, in which case such higher limits shall apply.

26. Pursuant to the provisions of A.R.S. §41-4401, the Vendor warrants to the Town that the Vendor and all its subcontractors are in compliance with all Federal Immigration laws and regulations that relate to their employees and with the E-Verify Program under A.R.S. §23-214(A). The Vendor acknowledges that a breach of this warranty by the Vendor or any of its subcontractors is a material breach of this contract subject to penalties up to and including termination of this contract or any subcontract. The Town retains the legal right to inspect the papers of any employee of the Vendor or any subcontractor who works on this contract to ensure compliance with this warranty.

The Town may conduct random verification of the employment records of the Vendor and any of its subcontractors to ensure compliance with this warranty.

The Town will not consider the Vendor or any of its subcontractors in material breach of the foregoing warranty if the Vendor and its subcontractors establish that they have complied with the employment verification provisions prescribed by 8 USCA §1324(a) and (b) of the Federal Immigration and Nationality Act and the e-verify requirements prescribed by Arizona Revised Statutes §23-214(A).

The provisions of this section must be included in any contract the Vendor enters into with any and all of its subcontractors who provide services or Goods under this contract or any subcontract. As used in this Section, "services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

**Water Infrastructure Finance Authority of Arizona  
Clean Water Revolving Fund  
Drinking Water Revolving Fund**

**CONTRACT PACKET for Governmental Borrowers**

*This packet lists required contract conditions that apply to all Clean Water and Drinking Water Revolving Fund projects and contains forms that must be used in the procurement process. Please review this packet prior to bidding. This packet must be physically included in all bidding, solicitation and contract documents.*

**PLEASE NOTE**

- Federal Davis Bacon prevailing wages apply to this project. Payment of the wages, fringe benefits and overtime rates is required.
- The appropriate Federal (Davis Bacon) Prevailing Wage Decision Number must be physically incorporated into the bidding and contract documents.
- The construction category of Heavy (excluding dam construction) should typically be applied to all projects funded by WIFA. If you believe that a different category of wages, such as Building, should be applied to your project or portions of your project, please contact WIFA in advance.
- Weekly certified payroll submittal is required under the Federal Davis Bacon laws.
- Compliance with the Civil Rights Act and Equal Employment Opportunity is required.
- Promotion of Small, Minority and Women-owned Businesses and participation in Disadvantaged Business Enterprises (DBE) is required.

**Water Infrastructure Finance Authority of Arizona**  
**Clean Water Revolving Fund**  
**Drinking Water Revolving Fund**

**Required Contract Conditions**

This project is being financed in whole or in part by the Water Infrastructure Finance Authority of Arizona through the Clean Water or Drinking Water Revolving Fund. The loan recipient is required to comply with the following federal and state laws, rules and regulations and must ensure that their contractor(s) also comply(ies) with these regulations, laws and rules.

1. (i) Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352, 42 U.S.C. Sec. 2000d), (ii) the Rehabilitation Act of 1973 (Pub. L. 93-1123, 87 Stat. 355, 29 U.S.C. Sec. 794), (iii) the Age Discrimination Act of 1975 (Pub. L. 94-135 Sec. 303, 89 Stat. 713, 728, 42 U.S.C. Sec. 6102), (iv) Section 13 of the Federal Water Pollution Control Act (Pub. L. 92-500, 33 U.S.C. Sec. 1251), and subsequent regulations, ensures access to facilities or programs regardless of race, color, national origin, sex, age or handicap.
2. Equal Employment Opportunity (Executive Order 11246, as amended by Executive Orders 11375 and 12086 and subsequent regulations). Prohibits employment discrimination on the basis of race, color, religion, sex or national origin. Inclusion of the seven clauses in Section 202 of Executive Order 11246 as amended by Executive Orders 11375 and 12086 are required in all project related contracts and subcontracts over \$10,000.
3. (i) Promoting the use of Small, Minority, and Women-owned Businesses (Executive Orders 11625, 12138 and 12432), (ii) Small Businesses Reauthorization & Amendment Act of 1988 (Section 129 of Pub. L. 100-590), (iii) Department of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1993 (Pub. L. 102-389, 42 U.S.C. Sec. 437d), and (iv) Title X of the Clean Air Acts Amendments of 1990 (Pub. L. 101-549, 42 U.S.C. Sec. 7601 note) (“EPA’s 10% statute”). Encourages recipients to award construction, supply and professional service contracts to minority and women’s business enterprises (MBE/WBE) and small businesses and requires recipients to utilize affirmative steps in procurement.
4. Participation by Disadvantaged Business Enterprises in Procurement under Environmental Protection Agency (EPA) Financial Assistance Agreements (40 C.F.R. Part 33).
5. Debarment and Suspension (Executive Order 12549). Prohibits entering into contracts or sub-contracts with individuals or businesses who are debarred or suspended. Borrowers are required to check the status of all contractors (construction and professional services) and must require contractors to check the status of subcontractors for contracts expected to be equal to or over \$25,000 via this Internet address: [epls.arnet.gov](http://epls.arnet.gov).

6. E-Verify (A.R.S. § 41-4401). A governmental entity shall not award a contract to any contractor or subcontractor that fails to comply with A.R.S. § 23-214(A). Every government entity shall (i) ensure that every government entity contractor and subcontractor complies with the federal immigration laws and regulations that relate to their employees and A.R.S. § 23-214(A); (ii) require that every government entity contract include the required provisions listed under A.R.S. § 41-4401(A); and (iii) establish procedures to conduct random verification of the employment records of government entity contractors and subcontractors.

**Water Infrastructure Finance Authority of Arizona  
Clean Water Revolving Fund  
Drinking Water Revolving Fund**

**Davis Bacon Contract Conditions (Federal Prevailing Wages)**

**PLEASE NOTE:** Federal Davis Bacon prevailing wages apply to this project. Payment of the wages, fringe benefits and overtime rates is required.

The “subrecipient” referred to throughout the Davis Bacon contract conditions is the WIFA Borrower.

“WIFA” is the Water Infrastructure Finance Authority of Arizona, State Capitalization Grant recipient, recipient, or the Authority.

The language starting on the next page must be included in all Davis Bacon covered construction contracts and subcontracts. (29 CFR Part 5.5)

## **Wage Rate Requirements under FY 2010 Appropriations (Also referred to as Attachment 6)**

### **Preamble**

With respect to the Clean Water and Drinking Water State Revolving Funds, EPA provides capitalization grants to each State which in turn provides subgrants or loans to eligible entities within the State. Although EPA and the State remain responsible for ensuring subrecipients' compliance with the wage rate requirements set forth herein, those subrecipients shall have the primary responsibility to maintain payroll records as described in Section 3(3)(ii)(A) below and for compliance as described in Section 5.

### **Requirements under FY 2010 Appropriations for Subrecipients That Are Governmental Entities:**

The following terms and conditions specify how recipients will assist EPA in meeting its Davis Bacon (DB) responsibilities when DB applies to EPA awards of financial assistance under the FY 2010 Appropriations with respect to State recipients and subrecipients that are governmental entities. If a subrecipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient. If a State recipient needs guidance, the recipient will contact EPA. The recipient or subrecipient may also obtain additional guidance from DOL's web site at <http://www.dol.gov/whd/recovery/index.htm>.

#### **1. Applicability of the Davis Bacon prevailing wage requirements.**

Under the FY 2010 Appropriation, Davis Bacon prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a Clean Water Revolving Fund and to any construction project carried out in whole or in part by assistance made available by a Drinking Water Revolving Fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the State recipient before authorizing work on that site.

#### **2. Obtaining Wage Determinations.**

(a) Subrecipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

- (i) While the solicitation remains open, the subrecipient shall monitor [www.wdol.gov](http://www.wdol.gov) weekly to ensure that the wage determination contained in the solicitation remains current. The subrecipient shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipient may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the subrecipient.

(ii) If the subrecipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the subrecipient, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The subrecipient shall monitor [www.wdol.gov](http://www.wdol.gov) on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the subrecipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the subrecipient shall insert the appropriate DOL wage determination from [www.wdol.gov](http://www.wdol.gov) into the ordering instrument.

(c) Subrecipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a subrecipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the subrecipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the subrecipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The subrecipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

### **3. Contract and Subcontract provisions.**

The recipient shall insure that the subrecipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project under the DWSRF financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in 29 CFR § 5.1 or the FY 2010 appropriation, the following clauses:

#### **(1) Minimum wages.**

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's web site, [www.dol.gov](http://www.dol.gov).

(ii)(A) The subrecipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the subrecipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the subrecipient(s) to the State award official. The State award official will transmit the request, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the subrecipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request and the local wage determination, including the views of

all interested parties and the recommendation of the State award official, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The subrecipient(s), shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the recipient may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis Bacon Act, the

contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the subrecipient, that is, the entity that receives the subgrant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the subrecipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at [www.dol.gov/whd/forms/wh347instr.htm](http://www.dol.gov/whd/forms/wh347instr.htm) or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the subrecipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the subrecipient(s).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### (4) Apprentices and trainees -

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the Apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency

recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis Bacon and Related Act requirements. All rulings and interpretations of the Davis Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and subrecipient(s), the State recipient, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### **4. Contract Provision for Contracts in Excess of \$100,000.**

(a) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3 above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of 40 hours in such workweek unless such

laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The subrecipient, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3 above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the subrecipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the subrecipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the recipient and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

## **5. Compliance Verification**

(a) The subrecipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The subrecipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are included with this packet.

(b) The subrecipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, the subrecipient should conduct interviews with a representative group of covered employees within two weeks of each contractor or subcontractor's submission of its initial weekly payroll data and two weeks prior to the estimated completion date for the contract or subcontract. Subrecipients must conduct more frequent interviews if the initial interviews or other information indicate that there is a risk that the contractor or subcontractor is not complying with DB. Subrecipients shall immediately conduct necessary interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.

(c) The subrecipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The subrecipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the subrecipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Subrecipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the subrecipient shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.

(d) The subrecipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Subrecipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed below and to the appropriate DOL Wage and Hour District Office listed at [www.dol.gov/whd](http://www.dol.gov/whd).

**Joe Ochab, EPA Region 9, 75 Hawthorne St. (P-22), San Francisco, CA 94105**

**Clean Water Revolving Fund  
Drinking Water Revolving Fund**

**Equal Employment**

Inclusion of these seven clauses (excerpt from Executive Order No. 11246, Section 202 as amended by Executive Order 11375 and 12086) is required in all CWRP and DWRP project related contracts and subcontracts over \$10,000:

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or worker's representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and all of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of Sept. 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in

Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of Sept. 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of Sept. 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

**Water Infrastructure Finance Authority of Arizona  
Clean Water Revolving Fund  
Drinking Water Revolving Fund**

**Disadvantaged Business Enterprises (DBE)**

**Good Faith Efforts**

Borrowers and their prime contractors must follow, document, and maintain documentation of their good faith efforts as listed below to ensure that Certified Disadvantage Business Enterprises (DBEs) have the opportunity to participate in the project by increasing DBE awareness of procurement efforts and outreach.

1. Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities; including placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitation for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
3. Consider in the contracting process whether firms competing for large contracts could be subcontracted with DBEs. This will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
5. Use the services and assistance of the Small Business Administration and the Minority Business Development Agency of the U. S. Department of Commerce.
6. If the prime contractor awards subcontracts, require the prime contractor to take the steps in numbers 1 through 5 above.

**Required Contract Conditions**

These conditions must be included in all procurement contracts entered into by the Borrower for all DWRF and CWRF projects:

1. The prime contractor must pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the owner.
2. The prime contractor must notify the owner in writing prior to the termination of any Disadvantage Business Enterprise subcontractor for convenience by the prime contractor.
3. If a Disadvantage Business Enterprise contractor fails to complete work under the subcontract for any reason, the prime contractor must employ the six good faith efforts if soliciting a replacement contractor.
4. The prime contractor must continue to employ the six good faith efforts even if the prime contractor has achieved its fair share objectives.

5. The prime contractor must provide EPA Form 6100-2 DBE Program Subcontractor Participation Form\*\* to all of its Disadvantaged Business Enterprise subcontractors. Disadvantaged Business Enterprise subcontractors may send completed Form 6100-2 directly to the Region 9 DBE Coordinator listed below:

**Joe Ochab, EPA Region 9, 75 Hawthorne St. (P-22), San Francisco, CA 94105**

6. The prime contractor must have its Disadvantaged Business Enterprise subcontractors complete EPA Form 6100-3 - DBE Program Subcontractor Performance Form\*\*. The prime contractor must include all completed forms as part of the prime contractor's bid or proposal package to the Borrower.
7. The prime contractor must complete and submit EPA 6100-4 DBE Program Subcontractor Utilization Form\*\* as part of the prime contractor's bid or proposal package to the Borrower.
8. A Borrower must ensure that each procurement contract it awards contains the following terms and conditions:

The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.

\*\* DBE forms can be downloaded from [www.epa.gov/osbp/grants.htm](http://www.epa.gov/osbp/grants.htm)

## ATTACHMENTS

### DBE Forms

[www.epa.gov/osbp/grants.htm](http://www.epa.gov/osbp/grants.htm)

6100-2 - DBE Program Subcontractor Participation Form

6100-3 - DBE Program Subcontractor Performance Form

6100-4 - DBE Program Subcontractor Utilization Form

### Davis Bacon Forms

WH-1321 - Davis Bacon poster

WH-347 - Payroll and certification form

SF1444 - Wage Determination Request form

SF1445 - Interview form

## Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Participation Form

An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE<sup>1</sup> subcontractor<sup>2</sup> the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g., in areas such as termination by prime contractor, late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the EPA DBE Coordinator at any time during the project period of performance.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

Contract Item Number	Description of Work Received from the Prime Contractor Involving Construction, Services, Equipment or Supplies	Amount Received by Prime Contractor

<sup>1</sup> A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

<sup>2</sup> Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.



### Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Performance Form

This form is intended to capture the DBE<sup>1</sup> subcontractor's<sup>2</sup> description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractor's bid or proposal package.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor
DBE Certified By: ___ DOT ___ SBA ___ Other: _____		Meets/ exceeds EPA certification standards? ___ YES ___ NO ___ Unknown

<sup>1</sup> A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

<sup>2</sup> Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

**Disadvantaged Business Enterprise (DBE) Program  
DBE Subcontractor Performance Form**

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

<b>Prime Contractor Signature</b>	<b>Print Name</b>
<b>Title</b>	<b>Date</b>

<b>Subcontractor Signature</b>	<b>Print Name</b>
<b>Title</b>	<b>Date</b>

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

### Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Utilization Form

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE<sup>1</sup> subcontractors<sup>2</sup> and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Issuing/Funding Entity:			

I have identified potential DBE certified subcontractors	__ YES	__ NO	
If yes, please complete the table below. If no, please explain:			
Subcontractor Name/ Company Name	Company Address/ Phone/ Email	Est. Dollar Amt	Currently DBE Certified?

Continue on back if needed

<sup>1</sup> A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

<sup>2</sup> Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

**Disadvantaged Business Enterprise (DBE) Program  
DBE Subcontractor Utilization Form**

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

<b>Prime Contractor Signature</b>	<b>Print Name</b>
<b>Title</b>	<b>Date</b>

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

# EMPLOYEE RIGHTS UNDER THE DAVIS-BACON ACT

## FOR LABORERS AND MECHANICS EMPLOYED ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

### PREVAILING WAGES

You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this Notice for the work you perform.

### OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

### ENFORCEMENT

Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for up to three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

### APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

### PROPER PAY

If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

Water Infrastructure Finance Authority of Arizona  
100 N. 15<sup>th</sup> Ave, Suite 103  
Phoenix, AZ 85007  
Tel: (602) 364-1310  
Fax: (602) 364-1327

or contact the U.S. Department of Labor's Wage and Hour Division.



For additional information:

**1-866-4-USWAGE**

(1-866-487-9243) TTY: 1-877-889-5627



**WWW.WAGEHOUR.DOL.GOV**

# DERECHOS DEL EMPLEADO BAJO LA LEY DAVIS-BACON

## PARA OBREROS Y MECÁNICOS EMPLEADOS EN PROYECTOS DE CONSTRUCCIÓN FEDERAL O CON ASISTENCIA FEDERAL

LA SECCIÓN DE HORAS Y SUELDOS DEL DEPARTAMENTO DE TRABAJO DE EEUU

### **SALARIOS PREVALECIENTES**

No se le puede pagar menos de la tasa de pago indicada en la Decisión de Salarios Davis-Bacon fijada con este Aviso para el trabajo que Ud. desempeña.

### **SOBRETIEMPO**

Se le ha de pagar no menos de tiempo y medio de su tasa básica de pago por todas las horas trabajadas en exceso de 40 en una semana laboral. Existen pocas excepciones.

### **CUMPLIMIENTO**

Se pueden retener pagos por contratos para asegurarse que los obreros reciban los salarios y el pago de sobretiempo debidos, y se podría aplicar daños y perjuicios si no se cumple con las exigencias del pago de sobretiempo. Las cláusulas contractuales de Davis-Bacon permiten la terminación y exclusión de contratistas para efectuar futuros contratos federales hasta tres años. El contratista que falsifique los registros certificados de las nóminas de pago o induzca devoluciones de salarios puede ser sujeto a procesamiento civil o criminal, multas y/o encarcelamiento.

### **APRENDICES**

Las tasas de aprendices sólo se aplican a aprendices correctamente inscritos bajo programas federales o estatales aprobados.

### **PAGO APROPIADO**

Si Ud. no recibe el pago apropiado, o precisa de información adicional sobre los salarios aplicables, póngase en contacto con el Contratista Oficial que aparece abajo:

Water Infrastructure Finance Authority of Arizona  
100 N. 15<sup>th</sup> Ave, Suite 103  
Phoenix, AZ 85007  
Tel: (602) 364-1310  
Fax: (602) 364-1327

o póngase en contacto con la Sección de Horas y Sueldos del Departamento de Trabajo de EEUU.



Para obtener información adicional:

**1-866-4-USWAGE**

(1-866-487-9243) TTY: 1-877-889-5627



**WWW.WAGEHOUR.DOL.GOV**





## **SF 1444 Instructions**

### **Request for Additional Classification and Wage Rate Form**

Attached is a copy of the federal standard form 1444, Request for Authorization of Additional Classification and Wage Rate. This form must be submitted when a wage classification is not listed on the applicable wage decision. The classification and wage rate submitted on the form should bear a reasonable likeness to similar skill classifications listed in the federal wage determination.

The prime contractor is responsible for the completion and submission of this form. The following are the procedures for the completion and submission of the form:

1. Check "Construction Contract" in the upper right-hand corner.
- Box 2. Insert the following information:  
**Water Infrastructure Finance Authority of Arizona (WIFA)**  
**1110 W. Washington St., Suite 290**  
**Phoenix, AZ 85007**
- Box 3. Prime contractor's name.
- Box 4. Date the prime contractor submitted the form to WIFA.
- Box 5. Contract number.
- Box 6. Date the bid was opened, if applicable.
- Box 7. Date the contract was awarded.
- Box 8. Actual date the contractor will be starting or started work.
- Box 9. (This box is not applicable.)
- Box 10. List all subcontractors that will utilize the labor classification listed in box 13a. If none, enter "N/A."
- Box 11. Project title and a brief description of the project.
- Box 12. Include both the city and county, as well as Arizona.
- Box 13. Federal "General Decision Number" (e.g. AZ00009) and the date.
- Box 13a. List all classifications not covered by the federal wage determination, which are utilized by either the prime or the subcontractor(s).
- Box 13b. The wage rate should bear a reasonable likeness to the category classification wage rates (equipment operators, laborers, truck drivers, etc.) listed in the federal wage determination.
- Box 13c. The fringe rate should bear a reasonable likeness to the category classification fringe rates (equipment operators, laborers, truck drivers, etc.) listed in the federal wage determination.
- Box 14. If there is a subcontractor listed on line 10, its representative signs on this line.
- Box 15. The prime contractor's representative must sign on this line.
- Box 16. If the contractor has a specific employee who will be performing the labor classification(s) listed in box 13a, or if the employees' have legal representation (union, etc.), they should sign this line and include their title. If no specific employee is identified to perform work under the listed classification(s), then write "unknown" in the box. The "Agree" or "Disagree" boxes are checked by anyone signing in boxes 14, 15, and 16.

**The contractor will make a copy of the completed signed form and submit the original to WIFA (not required to be in quadruplicate).**

**WIFA will complete the section below the heavy line TO BE COMPLETED BY CONTRACTING OFFICER and submit it to DOL and EPA. Typically DOL responds in 30 days. WIFA will send the borrower a copy of the approved wage classification.**

**PAYROLL**

(For Contractor's Optional Use; See Instructions at [www.dol.gov/whd/forms/wh347instr.htm](http://www.dol.gov/whd/forms/wh347instr.htm))



Rev. Dec. 2008

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

OMB No.: 1235-0008  
Expires: 01/31/2015

NAME OF CONTRACTOR		OR SUBCONTRACTOR		ADDRESS																
PAYROLL NO.		FOR WEEK ENDING		PROJECT AND LOCATION								PROJECT OR CONTRACT NO.								
(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS					(9) NET WAGES PAID FOR WEEK	
				HOURS WORKED EACH DAY	FICA	WITH- HOLDING TAX	OTHER	TOTAL DEDUCTIONS												
			O																	
			S																	
			O																	
			S																	
			O																	
			S																	
			O																	
			S																	
			O																	
			S																	
			O																	
			S																	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

**Public Burden Statement**

We estimate that it will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210



**REQUEST FOR AUTHORIZATION OF  
ADDITIONAL CLASSIFICATION AND RATE**

CHECK APPROPRIATE BOX  
 SERVICE CONTRACT  
 CONSTRUCTION CONTRACT

OMB No.: **9000-0089**  
 Expires: **04/30/2005**

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (MVP), Office of Acquisition Policy, GSA, Washington, DC 20405; and to the Office of Management and Budget, Paperwork Reduction Project (9000-0089), Washington, DC 20503.

**INSTRUCTIONS:** THE CONTRACTOR SHALL COMPLETE ITEMS 3 THROUGH 16, KEEP A PENDING COPY, AND SUBMIT THE REQUEST, IN QUADRUPPLICATE, TO THE CONTRACTING OFFICER.

<b>1. TO:</b> ADMINISTRATOR, Employment Standards Administration WAGE AND HOUR DIVISION U.S. DEPARTMENT OF LABOR WASHINGTON, D.C. 20210	<b>2. FROM:</b> (REPORTING OFFICE)
---	------------------------------------

3. CONTRACTOR	4. DATE OF REQUEST
---------------	--------------------

5. CONTRACT NUMBER	6. DATE BID OPENED (SEALED BIDDING)	7. DATE OF AWARD	8. DATE CONTRACT WORK STARTED	9. DATE OPTION EXERCISED (If APPLICABLE) (SCA ONLY)
--------------------	-------------------------------------	------------------	-------------------------------	---

10. SUBCONTRACTOR (IF ANY)

11. PROJECT AND DESCRIPTION OF WORK (ATTACH ADDITIONAL SHEET IF NEEDED)

12. LOCATION (CITY, COUNTY AND STATE)

13. IN ORDER TO COMPLETE THE WORK PROVIDED FOR UNDER THE ABOVE CONTRACT, IT IS NECESSARY TO ESTABLISH THE FOLLOWING RATE(S) FOR THE INDICATED CLASSIFICATION(S) NOT INCLUDED IN THE DEPARTMENT OF LABOR DETERMINATION

NUMBER: \_\_\_\_\_ DATED: \_\_\_\_\_

a. LIST IN ORDER: PROPOSED CLASSIFICATION TITLE(S); JOB DESCRIPTION(S); DUTIES; AND RATIONALE FOR PROPOSED CLASSIFICATIONS (SCA ONLY) <i>(Use reverse or attach additional sheets, if necessary)</i>	b. WAGE RATE(S)	c. FRINGE BENEFITS PAYMENTS

14. SIGNATURE AND TITLE OF SUBCONTRACTOR REPRESENTATIVE (IF ANY)	15. SIGNATURE AND TITLE OF PRIME CONTRACTOR REPRESENTATIVE
--	--

16. SIGNATURE OF EMPLOYEE OR REPRESENTATIVE	TITLE	CHECK APPROPRIATE BOX-REFERENCING BLOCK 13. <input type="checkbox"/> <b>AGREE</b> <input type="checkbox"/> <b>DISAGREE</b>
---	-------	---

**TO BE COMPLETED BY CONTRACTING OFFICER (CHECK AS APPROPRIATE - SEE FAR 22.1019 (SCA) OR FAR 22.406-3 (DBA))**

- THE INTERESTED PARTIES AGREE AND THE CONTRACTING OFFICER RECOMMENDS APPROVAL BY THE WAGE AND HOUR DIVISION. AVAILABLE INFORMATION AND RECOMMENDATIONS ARE ATTACHED.
- THE INTERESTED PARTIES CANNOT AGREE ON THE PROPOSED CLASSIFICATION AND WAGE RATE. A DETERMINATION OF THE QUESTION BY THE WAGE AND HOUR DIVISION IS THEREFORE REQUESTED. AVAILABLE INFORMATION AND RECOMMENDATIONS ARE ATTACHED.

*(Send copies 1, 2, and 3 to Department of Labor)*

SIGNATURE OF CONTRACTING OFFICER OR REPRESENTATIVE	TITLE AND COMMERCIAL TELEPHONE NO.	DATE SUBMITTED
--	------------------------------------	----------------

## Instructions for Completing Payroll Form, WH-347

OMB Control No. 1235-0008, Expires 01/31/2015.

**General:** Form WH-347 has been made available for the convenience of contractors and subcontractors required by their Federal or Federally-aided construction-type contracts and subcontracts to submit weekly payrolls. Properly filled out, this form will satisfy the requirements of Regulations, Parts 3 and 5 (29 C.F.R., Subtitle A), as to payrolls submitted in connection with contracts subject to the Davis-Bacon and related Acts.

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) requires contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) Regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Under the Davis-Bacon and related Acts, the contractor is required to pay not less than prevailing wage, including fringe benefits, as predetermined by the Department of Labor. The contractor's obligation to pay fringe benefits may be met either by payment of the fringe benefits to bona fide benefit plans, funds or programs or by making payments to the covered workers (laborers and mechanics) as cash in lieu of fringe benefits.

This payroll provides for the contractor to show on the face of the payroll all monies to each worker, whether as basic rates or as cash in lieu of fringe benefits, and provides for the contractor's representation in the statement of compliance on the payroll (as shown on page 2) that he/she is paying for fringe benefits required by the contract and not paid as cash in lieu of fringe benefits. Detailed instructions concerning the preparation of the payroll follow:

**Contractor or Subcontractor:** Fill in your firm's name and check appropriate box.

**Address:** Fill in your firm's address.

**Payroll No.:** Beginning with the number "1", list the payroll number for the submission.

**For Week Ending:** List the workweek ending date.

**Project and Location:** Self-explanatory.

**Project or Contract No.:** Self-explanatory.

**Column 1 - Name and Individual Identifying Number of Worker:** Enter each worker's full name and an individual identifying number (e.g., last four digits of worker's social security number) on each weekly payroll submitted.

**Column 2 - No. of Withholding Exemptions:** This column is merely inserted for the employer's convenience and is not a requirement of Regulations, Part 3 and 5.

**Column 3 - Work Classifications:** List classification descriptive of work actually performed by each laborer or mechanic. Consult classification and minimum wage schedule set forth in contract specifications. If

additional classifications are deemed necessary, see Contracting Officer or Agency representative. An individual may be shown as having worked in more than one classification provided an accurate breakdown of hours worked in each classification is maintained and shown on the submitted payroll by use of separate entries.

**Column 4 - Hours worked:** List the day and date and straight time and overtime hours worked in the applicable boxes. On all contracts subject to the Contract Work Hours Standard Act, enter hours worked in excess of 40 hours a week as "overtime".

**Column 5 - Total:** Self-explanatory

**Column 6 - Rate of Pay (Including Fringe Benefits):** In the "straight time" box for each worker, list the actual hourly rate paid for straight time worked, plus cash paid in lieu of fringe benefits paid. When recording the straight time hourly rate, any cash paid in lieu of fringe benefits may be shown separately from the basic rate. For example, "\$12.25/.40" would reflect a \$12.25 base hourly rate plus \$0.40 for fringe benefits. This is of assistance in correctly computing overtime. See "Fringe Benefits" below. When overtime is worked, show the overtime hourly rate paid plus any cash in lieu of fringe benefits paid in the "overtime" box for each worker; otherwise, you may skip this box. See "Fringe Benefits" below. Payment of not less than time and one-half the basic or regular rate paid is required for overtime under the Contract Work Hours Standard Act of 1962 if the prime contract exceeds \$100,000. In addition to paying no less than the predetermined rate for the classification which an individual works, the contractor must pay amounts predetermined as fringe benefits in the wage decision made part of the contract to approved fringe benefit plans, funds or programs or shall pay as cash in lieu of fringe benefits. See "FRINGE BENEFITS" below.

**Column 7 - Gross Amount Earned:** Enter gross amount earned on this project. If part of a worker's weekly wage was earned on projects other than the project described on this payroll, enter in column 7 first the amount earned on the Federal or Federally assisted project and then the gross amount earned during the week on all projects, thus "\$163.00/\$420.00" would reflect the earnings of a worker who earned \$163.00 on a Federally assisted construction project during a week in which \$420.00 was earned on all work.

**Column 8 - Deductions:** Five columns are provided for showing deductions made. If more than five deduction are involved, use the first four columns and show the balance deductions under "Other" column; show actual total under "Total Deductions" column; and in the attachment to the payroll describe the deduction(s) contained in the "Other" column. All deductions must be in accordance with the provisions of the Copeland Act Regulations, 29 C.F.R., Part 3. If an individual worked on other jobs in addition to this project, show actual deductions from his/her weekly gross wage, and indicate that deductions are based on his gross wages.

**Column 9 - Net Wages Paid for Week:** Self-explanatory.

**Totals** - Space has been left at the bottom of the columns so that totals may be shown if the contractor so desires.

**Statement Required by Regulations, Parts 3 and 5:** While the "statement of compliance" need not be notarized, the statement (on page 2 of the payroll form) is subject to the penalties provided by 18 U.S.C. § 1001, namely, a fine, possible imprisonment of not more than 5 years, or both. Accordingly, the party signing this statement should have knowledge of the facts represented as true.

**Items 1 and 2:** Space has been provided between items (1) and (2) of the statement for describing any deductions made. If all deductions made are adequately described in the "Deductions" column above, state "See Deductions column in this payroll." See "FRINGE BENEFITS" below for instructions concerning filling out paragraph 4 of the statement.

**Item 4 FRINGE BENEFITS - Contractors who pay all required fringe benefits:** If paying all fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable

wage decision of the Secretary of Labor, show the basic cash hourly rate and overtime rate paid to each worker on the face of the payroll and check paragraph 4(a) of the statement on page 2 of the WH-347 payroll form to indicate the payment. Note any exceptions in section 4(c).

**Contractors who pay no fringe benefits:** If not paying all fringe benefits to approved plans, funds, or programs in amounts of at least those that were determined in the applicable wage decision of the Secretary of Labor, pay any remaining fringe benefit amount to each laborer and mechanic and insert in the "straight time" of the "Rate of Pay" column of the payroll an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the application wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringe benefits, the overtime rate shall be not less than the sum of the basic predetermined rate, plus the half time premium on basic or regular rate, plus the required cash in lieu of fringe benefits at the straight time rate. In addition, check paragraph 4(b) of the statement on page 2 the payroll form to indicate the payment of fringe benefits in cash directly to the workers. Note any exceptions in section 4(c).

### **Use of Section 4(c), Exceptions**

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the covered worker as cash in lieu of fringe benefits. Enter any exceptions to section 4(a) or 4(b) in section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid each worker as cash in lieu of fringe benefits and the hourly amount paid to plans, funds, or programs as fringe benefits. The contractor must pay an amount not less than the predetermined rate plus cash in lieu of fringe benefits as shown in section 4(c) to each such individual for all hours worked (unless otherwise provided by applicable wage determination) on the Federal or Federally assisted project. Enter the rate paid and amount of cash paid in lieu of fringe benefits per hour in column 6 on the payroll. See paragraph on "Contractors who pay no fringe benefits" for computation of overtime rate.

---

**Public Burden Statement:** We estimate that it will take an average of 55 minutes to complete this collection of information, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection of information, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, ESA, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

<http://www.dol.gov/whd/forms/wh347instr.htm>



## EMPLOYEE INTERVIEW FOR DAVIS-BACON LABOR STANDARDS INSTRUCTIONS

The Davis-Bacon Act requires interviews to determine if the contractor is complying with the Federal Davis-Bacon prevailing wages. Interviewers must use WIFA’s interview form, Department of Labor’s Standard Form 1445, or equivalent documentation. WIFA’s form may be downloaded from WIFA’s website: [http://azwifa.gov/?pageid=contract\\_packet](http://azwifa.gov/?pageid=contract_packet). See Section 5: Compliance Verification of the WIFA Contract Packet for the interview requirements.

Interviews should be conducted in the following manner:

Interviewer: Each borrower is required to conduct interviews. The interviewer must be someone unaffiliated with the contractors and on site regularly (i.e., project manager, or consultant, etc.).

Purpose: The purpose of the interview is to ensure that the work actually being done by construction workers and mechanics is consistent with the corresponding job titles and wages being reported on the certified payrolls. The payroll checker must compare the interviews to the payrolls to identify inconsistencies. Any inconsistencies must be addressed. Keep in mind that both the interview and the information on the interview form are considered confidential. Interviews should be conducted individually and in private. All employees on the work site should be available for an interview if requested by the interviewer; however, the employee’s participation is voluntary.

Number of Interviews: A representative sample of interviews is required. The interviewer must interview at least one person from every contractor and subcontractor company on the job site.

Timing: Interviews should be done, at minimum, on two different occasions. One should be within the first two weeks after construction begins and whenever a new subcontractor begins work on the project. The second round should be done closer to substantial completion while workers are still on site. Additional interviews should be done when issues or discrepancies arise and should be targeted at the contractor in question.

Records: Interview forms should be kept by the borrower with the rest of the project records at least three years after the contract is completed. The interview forms have employee information that should be kept confidential from contractors generally, but the project folders must be available for inspection by WIFA, EPA, or Department of Labor upon request.

Item	INTERVIEW
2b. - 2c.	This information is required in case it is necessary to follow up with the employee.
3a.	The interviewer should make it clear to the employee that these items relate only to work on this project, not necessarily to other projects.
3b.	Employees should be encouraged (but not required) to produce pay stubs or pay envelopes which document the wages received.
5. - 6.	If the employee does not know where the wage rate decision and Davis-Bacon poster are posted, the interviewer should inform the person of the location(s) and encourage them to look at the documents.
8.	Many employees will not be familiar with the term “fringe benefits.” The interviewer should explain to the employee that fringe can be paid as part of their hourly rate, or can be in the form of benefits such as vacation, medical, etc.
9a. -9c.	The interviewer should make it clear to the employee that these items relate only to work on this project, not necessarily to other projects.

11. - 13.	Be certain that the employee's responses are specific. The employee may not be familiar with the classifications used on the wage determination and thus may use a term which may not be found on the determination. The answers to questions 12 and 13 should elicit enough information to identify the appropriate wage classification. Confirm the presumed wage classification with the employee.
-----------	---

<b>INTERVIEWER'S COMMENTS</b>	
16.	This represents some of the most important information gathered while conducting on-site interviews. Be specific about the duties the employee was observed performing. It may be easiest to make these observations before the interview. Comments in this section should include whether observed duties and tools used were the same as those described by the employee during the interview.
19. - 20.	This refers to the wage decision and date as posted on the job site. This information should be consistent with the contract documents.

<b>FOR USE BY PAYROLL CHECKER</b>	
21. - 22.	<p>The payroll checker can be the same person as the interviewer. If not, it should be someone familiar with the wage rate decision, labor standards provisions and the construction project.</p> <p>This part of the form is completed <i>after</i> receipt of the payroll reports covering the week during which the interview was conducted. It is important that the payroll reports are received in a timely manner so that the payroll checker can compare and verify the interview information and investigate discrepancies. Once the corresponding payroll reports are received, the information on the interview form must be compared to the payroll reports. Specifically, the payroll checker must check that:</p> <ul style="list-style-type: none"> <li>• the payroll report is consistent with the dates and hours the employee worked (Items 9a.-9c.).</li> <li>• the payroll report indicates that the employee's job classification is the same as that indicated by the employee in Items 11 - 13.</li> <li>• the payroll report indicates that the employee received the wages as s/he stated in Item 3a.</li> <li>• the payroll report indicates that the employee received the fringe benefits in the amount and as stated in Item 8.</li> <li>• the wages/fringes paid agree with the wage rate decision in the contract and any additional classification requests approved by DOL (SF1444).</li> </ul> <p>Any discrepancies noted between the interview form and payroll reports shall be reported in Item 22. <u>If discrepancies are noted, follow-up actions to resolve the discrepancies must be taken.</u> For example, if the payroll indicates that the employee worked a different number of hours than the employee indicated, the payroll checker must: a) contact the employee and ask for clarification; and b) request the contractor's actual time records. This should be done without revealing the identity of the employee, e.g. by asking for all employee records for one work week.</p>



## EMPLOYEE INTERVIEW FOR DAVIS-BACON LABOR STANDARDS

1a. Project Name		2a. Employee Name	
1b. Contract Number	Wage Decision and Date	2b. Employee Phone Number	
1c. Name of Prime Contractor		2c. Employee Home Address and Zip Code	
1d. Name of Employer and Supervisor			
3a. Hourly rate of pay <u>on this project</u> :	4. Do you know that you are working on a federally-funded project and that you are to be paid wages set by DOL (Davis-Bacon wages)?  Y      N	5. Do you know where the Davis-Bacon Wage Rate Decision for this project is posted?  Y      N	6. Do you know where the "Employee Rights under the Davis-Bacon Act" poster is posted?  Y      N
3b. Do you have your most recent paystub?  Y      N			
7a. Do you ever work over 8 hours per day?  Y      N	7b. Do you ever work over 40 hours per week?  Y      N	7c. Are you paid at least time and a half for overtime hours?  Y      N      N/A	8. Do you receive Fringe Benefits? Vacation    Y      N Medical      Y      N Pension      Y      N Cash/pay     Y      N Other:
9a. Date you began work <u>on this project</u> :	9b. Date of last work day <u>on this project</u> before interview:	9c. How many hours did you work on your last work day before this interview <u>on this job</u> ?	
10. What deductions other than taxes and social security are made from your pay?		11. Work Classification (list all <u>on this project</u> ):	
12. Your duties <u>on this project</u> :		13. Tools and equipment you use <u>on this project</u> :	
<b>THE ABOVE IS CORRECT TO THE BEST OF MY KNOWLEDGE</b>			
14. Employee Signature		Date	
15. Interviewer Signature		Interviewer Name	Date
<b>INTERVIEWER'S COMMENTS</b>			
16. Work employee was doing/tools employee was using when interviewed:		17. Is employee properly classified and paid?  Y      N	18. Are wage rate and poster displayed?  Y      N
		19. Wage Rate Decision Number:	20. Wage Rate Decision Date:
<b>FOR USE BY PAYROLL CHECKER</b>			
21. Is above information in agreement with payroll data?  Y      N	22. If no, provide explanation and resolution:		
23. Payroll Checker Signature	Payroll Checker Name	Date	