

# James Asbury

Cinnaminson, NJ - Email me on Indeed: [indeed.com/r/James-Asbury/7523e6b7c9caf182](https://www.indeed.com/r/James-Asbury/7523e6b7c9caf182)

## WORK EXPERIENCE

### Senior Mechanical Engineer

US Army Corps of Engineers - Philadelphia, PA - March 2002 to Present

Currently working as Resident Project Engineer and Owners Representative for the repowering and repair of the USACE large class hopper dredge WHEELER. Performing duties as a liaison between the owner and ships' crew, ship yard, and various contractors, both shipyard subcontractors and Government furnished contractors. Conducting daily inspections and interfacing with various trades on the ship to answer questions, provide clarifications, write requests for quotes, and develop independent estimates for the Government for negotiating change orders.

Supervising the installation of the replacement of the ships main propulsion plant and dredging power generation plant with new Caterpillar C280-16 and C280-12 Marine engines, new reduction gears, and all new auxiliary machinery, including new lube oil systems, fuel oil systems, cooling systems, starting air systems, oily water separator system, new crank case ventilation systems for each of the ships seven engines, replacement of the ships three ships service generator alternators, modifications to the bilge and ballast system supporting the new engines, installation of a new oily water separator, and a complete new Integrated Control and Monitoring System, incorporating signals and controls for all of the ships major equipment, and control of all control valves in the engineering spaces.

Working directly with and in support of the ships' Port Engineers on repair work to the ship including the replacement of the tail shafts, installing new propellers, replacement of the hydraulic power plant and all new piping for the controllable pitch propeller systems, repairs of the hull and hopper plating and structure with new steel to replace damaged and worn steel, installation of a new variable frequency drive for the ships' bow thruster.

#### Other Major Refit Projects:

Onsite Project Engineer for the lengthening of the Dustpan Dredge HURLEY. Lengthened the dredge by 48 feet from 300 feet to 348 feet, and extended the ships dredging ladder in order to increase the dredging depth from 40 to 75 feet. Supervised and advised the yard workers on the construction of each item. Provided technical support as required to ensure the project was completed on time.

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Onsite Project Engineer for the installation of a new stern in the dustpan dredge JADWIN. Project included onsite development of construction drawings for the integration of modern construction techniques into a 1933 era riveted hull construction vessel, installation of new kort nozzles and propellers, design and construction of new steering and flanking rudders, and the modification of the rudder steering system in order to support the new rudders. Supervised and advised the yard workers on the construction of each item. Provided technical support as required to ensure the project was completed on time.

Designed a new propulsion engine and chiller cooling system, including the design and selection of all new piping, pumps, heat exchangers, structural modifications to the hull. Developed the installation drawings for

required hull modifications, and piping system changes for the USACE flagship towboat M/V MISSISSIPPI. Worked as the onsite project engineer supervising the installation of the new cooling systems and all required structural and hull modifications in support of the installation on the M/V MISSISSIPPI.

Use AutoCAD extensively to develop designs and plans for the repair of existing vessels, ships piping and mechanical systems, and concept designs for new vessels. Work with naval architects, structural engineers, and electrical engineers while developing plans, to ensure all areas of the design are considered and included.

Perform shipyard site surveys and visits during vessel construction or repair to ensure that shipyard are complying with drawings and specifications on vessels under construction or repair.

Godwin Pumps of America - Applications Engineer  
Bridgeport, NJ

Worked as an Applications Engineer and Project Manager for a leading diesel powered centrifugal pump manufacturer and pump rental company.

Designed pumping systems based on customer requirements in order to maximize pumping efficiency and minimize cost to the customer. Pumping system design included selecting the correct pump, appropriate size suction and discharge piping, fittings, and pipe routing at the job site for optimum pump performance. Developed pumping system curves using Excel Spread sheets and performed hydraulic calculations using the Hazen-Williams method. Pumping applications included sewer system bypass pumping systems, mine dewatering, dewatering and tank cleaning applications for oil refineries and chemical plants, and permanently installed emergency backup pumping systems.

Developed an entire new portable dewatering pump using a lobe type positive displacement pumpend for well pointing applications. Designed the pumpset layout, including the placement of the diesel engine and electric motor for diesel of electric applications. Designed the pump set using 3D AutoCAD to develop the concept and design for approval by the chief engineer prior to building the pumpset. Performed pump tests at the pump testing facility in order to develop pump curves for custom applications in order to meet customers' requirements, for design verification, and to simulate the customers' system curve and pump operating points.

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## EDUCATION

### **Bachelor of Science in Mechanical Engineering, focus in Heat transfer, thermal fluid sciences**

Drexel University - Philadelphia, PA  
1999 to 2004

## SKILLS

Project Engineering, mechanical design, team building, project management

## ADDITIONAL INFORMATION

Honors and Awards:

Cub Scout Leader Award of Merit - 2012

Army Commanders Award for Civilian Service - 2007

Citation for Outstanding Customer Service - 2005

Federal Executive Board Excellence in Government Service, Non-Supervisory Rookie of the Year, Bronze Medalist, 2003.

Eagle Scout - 1988