Class Concept

This is skilled work in the operation of a dredge used for maintaining channels and harbors for the stateoperated ferry system. Positions perform a variety of operations in maneuvering a dredge in such a fashion as to make required underwater cuts and fills in order to keep channels and docking facilities open. Positions pilot dredge tender for towing dredge and auxiliary equipment to work areas; secure dredge and auxiliary equipment at workstation; assist Dredge Captain in determining areas to be dredged; and determine width and depth of cuts and fills and the need for specialized equipment. Positions operate dredge in making required cuts and observe the operation of the cutting head discharge pipes in order to make adjustments. Work involves the supervision of mechanics and other dredge personnel in maintaining dredges, work barges, and related dredging equipment. Work requires knowledge of seamanship, currents, and tides in order to apply techniques and procedures particular to dredging operations. Positions also support the completion of marine maintenance projects involving the inspection, repair, and installation of channel markers, dolphin clusters, fenders, ferry docks, ramps, and gantries. Work is performed under the general supervision of the Dredge Captain who reviews work during progress and upon completion for conformance to instructions and work schedules.

Recruitment Standards

Knowledge, Skills, and Abilities

- Considerable knowledge of dredging techniques and procedures and the types and operation of mechanical equipment involved.
- Considerable knowledge of the maintenance and repair of pumps, gasoline and diesel engines and electrical generating systems.
- Considerable knowledge of seamanship, currents, tides, and the geography of the coastal area where dredging operations are scheduled.
- Skill in the operation of dredge equipment, boats, and related equipment.
- Skill in installing and repairing channel markers, dolphins, fenders, gantries, ferry docks, and ramps.
- Ability to mark areas to be dredged; and to make cuttings of proper depth and width.
- Ability to establish effective working relationships with members of a dredge crew and to supervise their work.

Minimum Education and Experience

High School or General Educational Development (GED) diploma with one year of progressive experience in dredge operations and related marine maintenance work.

Necessary Special Requirements

Transportation Worker Identification Credential Card (TWIC) issued by the Transportation Security Administration (TSA)

May require National Crane Operator certification, U.S. Coast Guard Master of Towing certification, and a Class A CDL.