

Portsmouth Naval Shipyard

Sails to Atoms

"When completed, the Super Flood Basin eliminates any additional risks associated with safely docking a submarine in Dry Dock #1." CAPT Daniel Ettlich, USN



Portsmouth Naval Shipyard Underwater Ledge Removal Fact Sheet

Construction Project Purpose

As part of Portsmouth Naval Shipyard's Dry Dock #1 Super Flood Basin construction, it is necessary to excavate a portion of underwater ledge in order to provide a deep enough basin capable of accommodating a modern-day fast attack submarine. The construction of a super flood basin at the head of Dry Dock #1 will create a lock system that significantly reduces the amount of calculated risk incurred each time a submarine is brought in or out of Dry Dock #1. Underwater explosives will be used as a means for bedrock excavation and the safe removal of the underwater ledge. This is a controlled evolution with safety as the top priority.

Dry Dock #1 Location

Dry Dock #1 is the middle dry dock located across from Prescott Park, Portsmouth, NH. The underwater ledge needed to be excavated is located at the head of Dry Dock #1.

Time

Blasting operations will be conducted during daylight hours Monday thru Saturday, commencing June 3, 2021 and continuing until February 2022. The actual detonations will occur once or twice a day, most frequently in the late afternoon.

Safety Precautions

Personnel safety will be the controlling consideration in all decisions involving blasting activities. In accordance with standard/industry construction practices, the contractor has incorporated a number of safety initiatives to ensure life, property, and the environment are not endangered.

The approved Safety Plan for this project is developed in harmony with all relevant laws and regulations, engineered specifications, industry standards and guidelines, regarding the safety and security of handling and using explosive materials. In addition, the project draws on the drilling and blasting team's extensive experience.

Marine Wildlife Protection

Measures are incorporated to minimize impacts on fish and marine wildlife. The Maine Department of Environmental Protection, Maine Department of Marine Resources, and the National Marine Fisheries are being consulted with prior to the work receiving approval. Because the blasting will be confined (a charge placed within a drilled hole of bedrock), impacts from each blast are anticipated to be muffled. In addition, the stemming of the blast charges (filling the hole with gravel or crushed stone), further contains blast energy within the bedrock and minimizes the amount of energy escaping into the surrounding body of water. Qualified marine wildlife observers will utilize industry standards to confirm marine wildlife are not in the blast zone prior to and during blasting activities. If marine wildlife are observed entering the established shutdown zone, construction activities will be delayed or halted until the animal has left the area. In addition, fish scare charges (small underwater noise makers) will be used to scare fish from the area prior to each blast. A bubble curtain will also be installed across any openings in the dry dock entrance to minimize underwater noise impacts outside the basin.

PNS Point of Contact

PNS Public Affairs Office at (207) 438-1525.