

LEGAL: PROJECT DELAY PENALTIES — TOO MUCH OR JUST RIGHT?

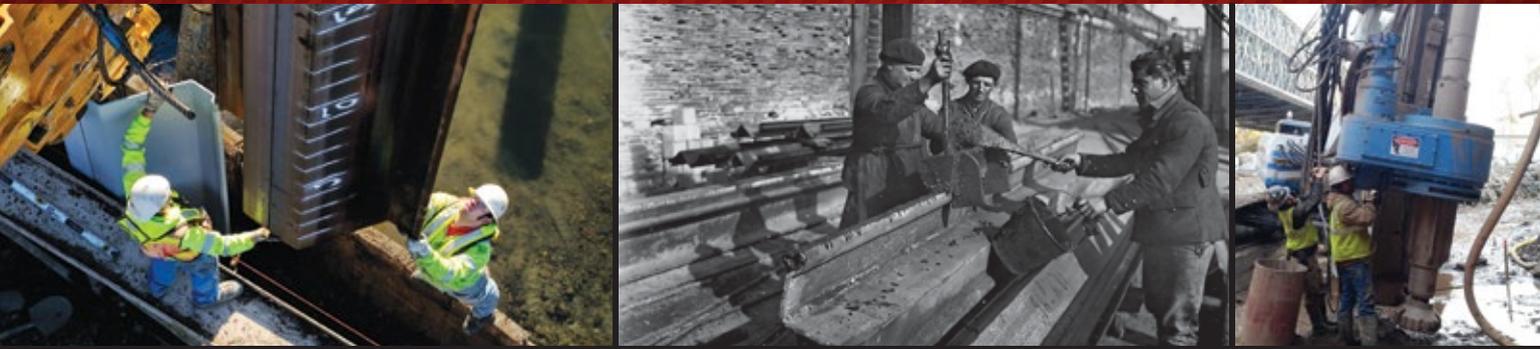
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THE PHOTO ISSUE

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PLUS

RTG PILE DRIVING RIGS

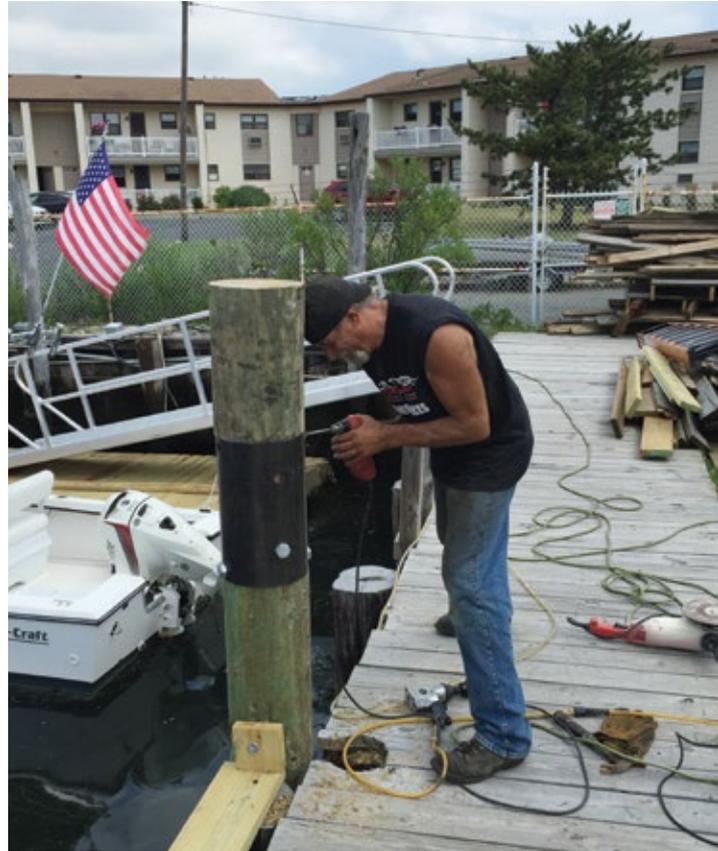
Bet Pays Off on PA Turnpike

BERMINGHAM DRILLING

At French Port Expansion

LIEBHERR'S LB 20 DRILLING RIG

Installs Piling for Dubai Culture Village Hotel



SPLICING TIMBER PILES

Monmouth, NJ By Harold Schmidt

A davit is a small crane-like piece of equipment used in a marina or yacht club. Many davits used in marine environments are fastened to existing timber piles because piles provide a strong attachment at a reasonable cost.

A good installation includes sizing the davit correctly for the intended use and mounting the davit high enough for sufficient clearance when lifting long or bulky objects such as boats.

Members of the Atlantis Yacht Club in Monmouth Beach, New Jersey found the club's davit especially useful for retrieving small boats and dinghies from the Shrewsbury River — but there was a problem.

Because the davit was installed too low on a short timber pile, the davit did not have sufficient clearance between the dock and davit boom when hauling a standard eight-foot dinghy.

Dinghies were lifted to the davit's height limit and then

“muscled” and dragged ashore over the dock.

Hal Schmidt, LoClear Piling Systems managing partner, offered their timber pile splicing system to increase the length of the existing attachment pile and raise the davit 18 inches.

After removing the davit, the first eight inches of the existing pile was planed into an 8 $\frac{1}{8}$ -inch cylinder using the LoClear proprietary timber pile planing machine.

An extension piece of pile was planed in a similar fashion.

The two planed pile butts were then joined using epoxy resin, a one-inch steel rebar, a $\frac{3}{4}$ inch by 9 $\frac{5}{8}$ inch by 16 inch steel sleeve, and 1 inch by 3 $\frac{1}{2}$ inch lag screws. The davit was remounted using through bolting and additional lag screws.

Soon after the splice was completed and davit reinstalled, club members used the davit to haul a water logged timber pile floating in a nearby slip.

The lift was successful, but the system was overloaded causing the davit boom to flex severely. The newly-spliced pile did not budge.



LoClear Piling Systems performed engineering testing on similar splices and achieved lateral loading of five tons before failure. A virgin 10-inch butt pile also failed at five tons when subjected to a similar test.

In recent years, governmental regulations have set new high water marks. Houses built on timber piles present an especially difficult challenge to meet the new high water marks because increasing the length or height of an existing timber pile has always been impractical and very expensive.

The LoClear system was developed because there wasn't an effective way to splice timber piles.

Splicing timber piles has become increasingly necessary to repair and lengthen existing piles to repair storm damage and adjust for rising ocean levels.

The LoClear system allows structures, including bulkheads, to be raised by extending the height of piles rather than replacing them.

Additionally, bridge pile repair is now possible because special fittings are available for attaching steel girders and jacking equipment to planed-pile butts.

Fittings are also available for installing cross bracing between piles.

H.A.L. Manufacturing LLC, LoClear's parent company, holds three U.S. patents on the system and equipment. More information and details are available at www.HALManufacturingLLC.com for details.