

## INDUSTRIES SERVED-**DUARRIES** ▶ HOT MIX ASPHALT ▶ SAND & GRAVEL ▶ READY-MIX CONCRETE

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## Museum masterpieces safe in the hands of Maine Drilling & Blasting professionals

Imagine this: A drilling and blasting operation virtu-ally on top of a priceless art collection. First of all, it's mind boggling to contemplate one art

museum in the United States with such a collection of invaluable masterpieces. Works by the Old Masters Raphael. Then there are the modern masters: Cézanne, Degas, Picasso, Renoir, Seurat and Van Gogh. Then add the works of significant American artists such as Homer, Eakins, Hassam, Peto and Ryder. It's an art historian's dream, and just part of the world-class collection housed at The Hyde Collection in Glens Falls, NY.

The Museum's collection spans art from the 4th Century BC through the 20th Century. The founders, Louis and Charlotte Hyde, acquired the majority of objects during a 50-year period of avid and highly informed collecting. The permanent collection con-sists of approximately 3,000 paintings, sculptures, works on paper, furniture and decorative arts.

And The Hyde Collection is located in close proxim-

In September and October of 2007, blasting pro-gressed toward an area of the quarry that had not been blasted for quite some time, and with The Hyde Collection located approximately 500 feet at the clos-est point to the new area to be blasted.

As blasting progressed closer and closer still, The Hyde Collection inquired as to why "things felt different."

"Even though our vibration readings were not over regulation, they did get higher the closer we got to the Museum," says Dale Boisvert, MD&B Western/NY quarry superintendent.

On Sept. 5, 2007, representatives of Jointa Galusha, Maine Drilling & Blasting and The Hyde Collection met. Concerns were discussed and it was reported that one blast had actually triggered one of the Museum's alarms. Naturally, Hyde representa-tives were anxious to know what could be done to allay their concerns and minimize any impact on this priceless art collection.

As a result of that meeting, Todd Harrington, MD&B Blasting Technical Manager, reviewed the recent blasting history of the quarry

"I think we understand what we are dealing with and the significance of the art collection that resides in those buildings. That building does, in fact, hold some of the most valuable art in the world; much of it priceless and irreplaceable," Harrington said at the time. "We are aware that there is concern on the part of the Museum's Board of Directors regarding the effect of the blasting on their art collection. We also



Programming an electronic detonator.



Crew loading shot.

know that the blasting has startled both the museum employees and their visitors.

As a first step, Maine Drilling & Blasting instituted a notification plan to assist in handling the issue of startling employees and visitors. After this step, the staff at Maine Drilling & Blasting put its head together with Jointa to review what else could be done. A program was implemented modifying blast design and verifying the accuracy of the drilling program to the design using the digital technologies of laser profiling. and boretracking. Lastly, we introduced electronic detonators into the blast design. More accurate than non-electronic detonators, electronic detonators facil-itate better energy usage, which increases breakage, decreasing vibration.

The Hyde Collection indicated improvement to the point of satisfaction. Blasting proceeded through the closest point to the museum facility without incident. Marijo Dougherty, at that time Interim Director of the Hyde, was invited to witness a shot.

Ms. Dougherty came down to the hole. We showed her the electronic detonators, and explained how the shots had been engineered strictly for the museum. She was very impressed and pleased with the resulting blast," said Gordon Carmichael, Blaster-in-Charge. "We were pleased since we were able to satisfy concerns without sacrificing production or breakage." Keith Jablonski, Facilities Manager of The Hyde

Collection made this observation:

"Being an art museum next to a quarry, vibration issues are critical. Even minor vibrations can affect the life of art, determining whether it will still be here 100 years from now. Maine Drilling and Jointa Galusha really stepped up to the plate. They were as concerned as we were, and treated our business as importantly as theirs, with much respect. Great team

Jointa Galusha was happy, as well. According to John Davidson, vice president of the company, "The electronic system gave us very positive results, under a couple special conditions. Not withstanding being 500 or so feet from the Hyde's priceless art collection, we also had peregrine falcons nesting with eggs just above the active face. The cost of going with electronic is significant, but it's saving us on oversize materials. We're getting better results out of the blasts in addition to better accuracy and reduced vibration."

Eventually work moved away from the corner of the quarry closest to the Museum and the last electronic detonator shot of the season happened on Dec. 13, 2007. Jointa Galusha noted improved production and requested continued use of electronic detonators despite the fact that the "original mission" had been accomplished. Production was up and wear and tear on loaders, etc., was down.

Closely following that decision came Jointa's request to have Maine Drilling & Blasting implement electronic detonators at their new quarry in Hartford, NY, to determine if similar production improvements

May be realized at that site, as well. Maine Drilling & Blasting, recognized as a leader in the industry, offers drilling and blasting services to the construction and quarry markets, along with a variety of specialty services throughout the Northeastern United States, including rock bolting, hoe ramming, engineering, public relations, preblast surveys and packaged and bulk distribution. In addition to the corporate office in Gardiner, Maine, Maine Drilling & Blasting has offices in New Hampshire, Vermont, New York, Massachusetts and Connecticut.

The Quarry Division of Maine Drilling & Blasting services 140 quarries across seven states, in pits from 10,000 to 1.5 million tons / year, offering turnkey drilling and blasting, laser profiling, bore tracking, seismic monitoring, public relations, and an in-house Engineering Department for comprehensive quarry planning.



Seismograph setup at The Hyde Collection, Glens Falls, NY.



A Peregrine falcon perched nearby.