



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

October 16, 2012

Engineering and Construction Division

Pattison Sand Company, LLC
Attention Kyle Pattison
701 First Street
Clayton, IA 52049

Dear Mr. Pattison

On February 1, 2012, Tom Dumoulin (Geologist) and George Millar (Engineering Technician) from our office visited Frenchtown Quarry (South Quarry) to collect samples for testing as a suitable riprap source. From Frenchtown Quarry (South Quarry) ten representative samples of Middle and Lower Galena Group limestone were collected from the quarry. Samples were collected from the Mortimer-Rivoli (20') and Fairplay Member (25') and the Shakopee Formation (61.5'). Three of the ten samples were subjected to 100 cycles of freeze-thaw testing in plain water. Before and after testing photographs are enclosed. The freeze-thaw loss results are tabulated below. A percent loss by weight greater than ten percent is considered unacceptable.

Sample Identification	Bed Tested	Percent Weight Loss (%)
SQF-2	Fairplay (G4)	0.5
SQM-3	Mortimer-Rivoli (G3)	0.5
SQS-3	Shakopee (1A & 1B)	0.2

Based on these test results, all of the stones passed the test for freeze-thaw damage resistance. Thus at Frenchtown Quarry (South Quarry) all tested Members will be added to the approved list of sources of riprap stone for the Rock Island District of the U.S. Army Corps of Engineers.

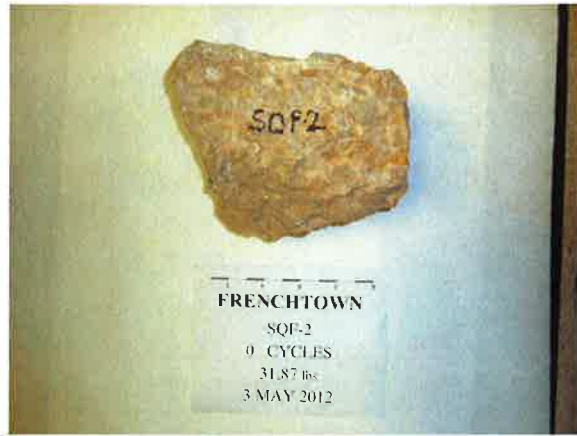
Your cooperation and assistance in our visit was appreciated. If you have any specific questions or comments, they may be directed to Tom Dumoulin at (309) 794-5880 or Derek Clark (309) 794-5717 from the Geotechnical Branch.

Sincerely,

Denny A. Lundberg, P.E.
Chief, Engineering and Construction Division

Enclosure

0 Cycles: 4 May 2012



100 Cycles: 5 October 2012

