

## MEMO

**To:** Kathleen Ramsay, Town Manager  
**From:** Bill Kernan, Director of Public Works Operations  
**Date:** September 17, 2018  
**RE:** Winter Sand Bids

Bids were solicited from five (5) different vendors this year and only one (1) was received from J.P. Carrara & Sons. The bid was also advertised locally.

Bidders were required to have their sand stockpile sampled by Vermont Testing & Consulting Corporation. Vermont Testing performed the analysis and forward the results to the Town.

The bid award is based on the percentage of sand and gravels passing a 0.5 inch sieve and excluding material passing a #200 sieve in the material sampled. The actual cost per ton is calculated on these percentages.

Carrara's price is \$9.75 per ton. Carrara sand and gravel tested at 96.7%. The calculated actual cost per ton is \$9.43 per ton.

**Recommend award to J. P. Carrara and Sons for Winter Sand at their quoted price of \$9.75 per ton (last year's bid was \$9.25 per ton as supplied by J.P. Carrara).**

TOWN OF MIDDLEBURY VERMONT  
77 MAIN STREET, MIDDLEBURY VT 05753

**BID FORM**

**FOR**

**SUPPLYING AND DELIVERING WINTER SAND**

**BID ITEMS:**

Winter Sand, Delivered

Price per Ton:

\$9.75

I have visited the Town's sand storage site and am familiar with the unloading process.

I have provided samples to the Towns Testing Company for testing typical of the sand I can provide.

I will maintain adequate Tons of Material tested to fulfill the Towns Contract.

Chad French

SIGNATURE

9/11/18

DATE

J. P. CARRARA

COMPANY

2464 CASE ST.

ADDRESS

802-388-6361

PHONE

GRAIN SIZE DISTRIBUTION TEST DATA

Test No.: 9

Date: 09/04/18  
 Project No.: 18-060  
 Project: WINTER SAND--J.P. CARRARA'S PIT

Sample Data

Location of Sample: WINTER SAND FROM A STOCKPILE AT PIT  
 Sample Description: WINTER SAND FROM JP CARRARA'S PIT -ON 09/04/18  
 USCS Class: SW Liquid limit:  
 AASHTO Class: A-1-b Plasticity index:

Notes

Remarks: CLIENT:TWN OF MIDDLEBURY SAMPLED BY VTCC  
 CHECK:JACQUES B.BOURAMIA LABORATORY NO.: 18-314  
 Fig. No.: 314  
 Specification: WINTER SAND SPECIFICATIONS

Mechanical Analysis Data

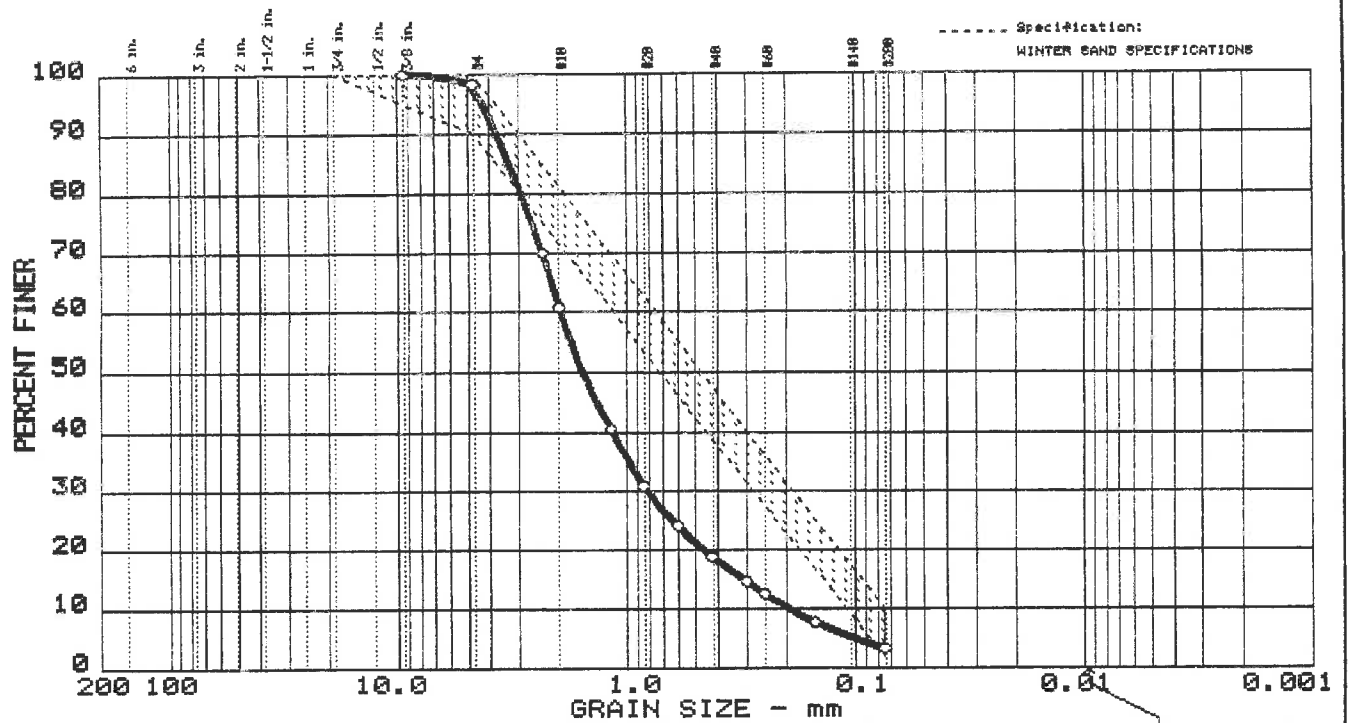
	Initial	After wash		
Dry sample and tare=	6228.10	6059.20		
Tare =	0.00	0.00		
Dry sample weight =	6228.10	6059.20		
Minus #200 from wash=	2.7 %			
Tare for cumulative weight retained=	0			
Sieve	Cumul. Wt. retained	Percent finer	Specification Limits, percent	Deviation, percent
0.375 inches	0.00	100.0		
# 4	106.10	98.3	90.0 to 100.0	
# 8	1872.10	69.9		
# 10	2448.20	60.7		
# 16	3699.10	40.6		
# 20	4301.20	30.9	(96.7% of material meets spec)	
# 30	4724.10	24.1		
# 40	5057.20	18.8		
# 50	5319.10	14.6		
# 60	5445.10	12.6		
# 100	5744.20	7.8		
# 200	6022.10	3.3	2.0 to 10.0	

Fractional Components

Gravel/Sand based on #4 sieve  
 Sand/Fines based on #200 sieve  
 % + 3 in. = 0.0      % GRAVEL = 1.7      % SAND = 95.0  
 % FINES = 3.3

D85= 3.29    D60= 1.972    D50= 1.565  
 D30= 0.8119    D15= 0.30867    D10= 0.19253  
 Cc = 1.7358    Cu = 10.2447

# GRAIN SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	1.7	95.0	3.3	

	LL	PI	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	C <sub>c</sub>	C <sub>u</sub>
○			3.29	1.97	1.56	0.812	0.309	0.193	1.74	10.2

MATERIAL DESCRIPTION	USCS	AASHTO
○ WINTER SAND FROM JP CARRARA'S PIT -0N 09/04/18	SW	A-1-b

<p>Project No.: 18-060                  Project: WINTER SAND--J.P. CARRARA'S PIT                  ○ Location: WINTER SAND FROM A STOCKPILE AT PIT                   Date: 09/04/18</p>	<p>Remarks:                  CLIENT: TOWN OF MIDDLEBURY                  SAMPLED BY VTCC                  CHECK: JACQUES B. BOURAMIA                  LABORATORY NO.: 18-314</p>
GRAIN SIZE DISTRIBUTION TEST REPORT <b>VT TESTING &amp; CONSULT CORP.</b>	
Figure No. 314	