UNIFIED SOILS SYMBOL BORING SAMPLE STRATUM

- OVERSIZE PARTICLES, LARGER THAN 3/8", REMOVED FROM GRADATION SPECIMEN.
DESCRIPTION APPLIES TO ENTIRE SAMPLE.

BAY PARK STP

225 WEST 34TH STREET, NEW YORK, N.Y. 10122

MUESE RUTLEDGE CONSULTING ENGINEERS

MADE BY: CJM DATE: 12-16-13 FILE NO. 12047
CHKO BY: RTW DATE: 12-20-13 PLATE NO. G-13

BORING NO. B-11, SHEET 1 OF 2
* OVERSIZE PARTICLES, LARGER THAN 3/8", REMOVED FROM GRADATION SPECIMEN. DESCRIPTION APPLIES TO ENTIRE SAMPLE.

**HYDROMETER ANALYSIS**

U.S. STANDARD SIEVES

- #200
- #100
- #70
- #50
- #40
- #30
- #16
- #10
- #8
- #4
- 3/8"
- 3/4"
- 1-1/2"
- 2"
- 3"

**SIEVE ANALYSIS**

**GRAIN SIZE IN MILLIMETERS**

<table>
<thead>
<tr>
<th>PERCENT FINER BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
</tr>
<tr>
<td>90</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>70</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

**GRAIN SIZE IN UNIFIED SOILS CLASSIFICATION**

- **CLAY OR SILT**
  - FINE
  - MEDIUM
  - COARSE

- **SAND**
  - FINE
  - MEDIUM
  - COARSE

- **GRAVEL**
  - FINE
  - COARSE

- **COBBLES**

**DESCRIPTION OF SAMPLE**

- Gray medium to fine sand, some clay, trace coarse sand, gravel (SC)
- Brown fine to coarse sand, some gravel, trace silt (SP-SM)
- Gray clayey medium to fine sand (SC)
- Brown fine to medium sand, trace silt (SP)
- Brown fine to medium sand, trace coarse sand, silt, gravel (SP)
- Brown fine to coarse sand, trace gravel, silt (SP)

**SYMBOL**

- ○ B-11 8D TOP
- □ B-11 8D BOT
- △ B-11 9D
- ◇ B-11 10D
- ▽ B-11 11D
- ▽ B-11 12D

**BORING NO. B-11, SHEET 2 OF 2**

**BAY PARK STP**

**MUESER RUTLEDGE CONSULTING ENGINEERS**

225 WEST 34TH STREET, NEW YORK, N.Y. 10122

**DATE:** 12-16-13
**FILE NO.:** 12047

**GRADATION CURVES**

**PLATE NO.:** G-14
* Oversize particles, larger than 3/8", removed from gradation specimen. Description applies to entire sample.
Description of Sample:

- **B-13P 1HA F**: Brown fine to medium sand, some silt, trace gravel, coarse sand, vegetation (SM)
- **B-13P 2HA F**: Brown fine to medium sand, some gravel, trace silt, coarse sand (SP-SM)
- **B-13P 4D F**: Brown fine to coarse sand, some gravel, trace silt (SP-SM)
- **B-13P 6D S**: Brown fine to medium sand, trace gravel, silt, coarse sand (SP-SM)
- **B-13P 7D S**: Gray fine to medium sand, trace gravel, silt, coarse sand (SP)
- **B-13P 9D S**: Tan and light brown fine sand, trace silt, medium sand (SP-SM)
- **B-13P 12D S**: Light brown medium to fine sand, trace coarse sand, silt, gravel (SP)

* Oversize particles, larger than 3/8", removed from gradation specimen. Description applies to entire sample.*
BAY PARK STP

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34TH STREET, NEW YORK, N.Y. 10122

MADE BY: CJM DATE: 12-16-13 FILE NO. 12047
CHNG BY: RTW DATE: 12-20-13

GRADATION CURVES
BORING NO. B-14, SHEET 1 OF 2
PLATE NO. G-18

UNIFIED SOILS CLASSIFICATION
SYMBOL BORING SAMPLE STRATUM -% OVERSIZED
○ B-14 1HA F 6.5
□ B-14 3HA F
△ B-14 6D S
◊ B-14 7D S
▼ B-14 8D S

CLAY OR SILT
DESCRIPTION OF SAMPLE
Brown fine to medium sand, trace silt, gravel, coarse sand, concrete, vegetation (SP-SM)
Tan brown gravelly fine to coarse sand, trace silt (SP)
Gray fine to coarse sand, some gravel, silt, trace vegetation (SM)
Brown fine to medium sand, some silt, trace coarse sand, gravel (SM)
Tan brown fine to medium sand, trace silt (SP-SM)

SAND
FINE MEDIUM COARSE

GRAVEL
FINE COARSE

COBBLES

GRANULATION CURVES

* OVERSIZE PARTICLES, LARGER THAN 3/8", REMOVED FROM GRADATION SPECIMEN. DESCRIPTION APPLIES TO ENTIRE SAMPLE.
Light brown fine to medium sand, trace coarse sand, gravel, silt (SP)
Light brown fine sand, trace medium sand, silt (SP)
Light brown fine sand, trace silt, medium sand (SP)
Orange brown fine to medium sand, some silt, trace clay pockets, coarse sand (SM)

* OVERSIZE PARTICLES, LARGER THAN 3/8", REMOVED FROM GRADATION SPECIMEN. DESCRIPTION APPLIES TO ENTIRE SAMPLE.
HYDROMETER ANALYSIS

U.S. STANDARD SIEVES

#200 #100 #70 #50 #40 #30 #16 #10 #8 #4 3/8" 1-1/2" 2" 3"

SIEVE ANALYSIS

OVERSIZE PARTICLES, LARGER THAN 3/8", REMOVED FROM GRADATION SPECIMEN.
DESCRIPTION APPLIES TO ENTIRE SAMPLE.

UNIFIED SOILS CLASSIFICATION

CLAY OR SILT

SAND

GRAVEL

COBBLES

SYMBOL BORING SAMPLE STRATUM % OVERSIZED DESCRIPTION OF SAMPLE

B-15 1HA F 8.5 Brown fine to coarse sand, some gravel, trace silt (SP)

B-15 2HA F 37.5 Tan brown gravelly fine to coarse sand, trace silt (SP)

B-15 4D F 23.2 Gray fine to medium sand, some gravel, silt, trace coarse sand (SM)

B-15 5D S Light brown fine to medium sand, trace silt, coarse sand, gravel (SP-SM)

B-15 6D S Tan, dark brown and orange brown fine to medium sand, trace silt, coarse sand (SP)

B-15 7D S Orange brown fine to medium sand, trace silt (SP)

B-15 10D TOP S Gray fine to medium sand, some silt, trace clay, coarse sand (SM)

B-15 10D BOT S Orange brown fine to medium sand, some silt, trace silty clay seams (SM)

BAY PARK STP

BAY PARK NEW YORK

MUESE RUTLEDGE CONSULTING ENGINEERS
225 WEST 34TH STREET, NEW YORK, N.Y. 10122

MADE BY: CJM DATE: 12-16-13 FILE NO. 12047

CJR RD BY: RTW DATE: 12-20-13

GRADATION CURVES PLATE NO.

BORING NO. B-15

G-20
HYDROMETER ANALYSIS

U.S. STANDARD SIEVES

#200 #100 #70 #50 #40 #30 #16 #10 #8 #4

3 1/2 " 2 3/4 " 3"

OVERSIZE PARTICLES, LARGER THAN 3/8", REMOVED FROM GRADATION SPECIMEN. DESCRIPTION APPLIES TO ENTIRE SAMPLE.

GRADATION CURVES
BORING NO. 8-16, SHEET 2 OF 2

BAY PARK STP
NEW YORK
MUESE RUTLEDGE CONSULTING ENGINEERS
225 WEST 34TH STREET, NEW YORK, N.Y. 10122

MADE BY: CJM DATE: 12-16-13 FILE NO. 12047
CHKD BY: RTW DATE: 12-20-13

ircular symbol
square symbol
triangle symbol
diamond symbol

SYMBOL  BORING  SAMPLE  STRATUM  DESCRIPTION OF SAMPLE

○  B-16  8D  S  Tan brown fine to medium sand, some silt, trace gravel (SM)

△  B-16  9D  S  Tan brown fine to medium sand, trace silt, coarse sand (SP)

△  B-16  10D  S  Tan brown fine to medium sand, trace silt (SP)

△  B-16  14D  S  Brown fine to coarse sand, trace silt, gravel (SP)

△  B-16  23D  S  Tan fine to coarse sand, some gravel, trace silt (SP)