Town of Islip – Department of Aviation

GEOTECHNICAL ENGINEERING REPORT

Compost Facility

Ronkonkoma, New York

May 2025

GEOTECHNICAL ENGINEERING REPORT

Compost Facility
Ronkonkoma, New York

May 2025

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1 Introduction

Arcadis of New York Inc. (Arcadis) has prepared this Geotechnical Engineering Report to support the Town of Islip (Town)/Long Island MacArthur Airport in support of the proposed future redevelopment of an approximately 46-acre parcel currently utilized as a compost facility by the Town (Site). The existing compost facility is situated at the northern boundary of Long Island MacArthur Airport (ISP), in Ronkonkoma, New York (Site) (**Figure 1**).

This report covers the subsurface investigative activities undertaken at the site in March 2025, and summarizes the findings from this investigation, foundation recommendations, and construction considerations for the Site. Arcadis understands that the specifics of the proposed development are under development by the Town and that this report serves as a preliminary evaluation of the Site's subsurface conditions. For the purposes of this report, Arcadis has assumed that the proposed development structures will be supported by shallow footing foundations. Elevations referenced in the report are measured in feet and refer to the North American Vertical Datum of 1988 (NAVD88).

2 Background

2.1 Site Description

The area for the proposed redevelopment is currently used by the Town as a compost facility. The area consists of both asphalt paved surfaces and unpaved ground. Majority of the ground area is currently covered by windrows of compost. Current grades across the proposed area range from approximately El. 97 feet relative to mean sea level (ft msl) along the eastern and western sides, sloping down to approximately El. 90 ft msl along the center of the site (Suffolk County GIS Open Data, 2023).

3 Subsurface Investigation

Arcadis executed a subsurface geotechnical field exploration program, which consisted of the advancement of nine test borings across the Site. Disturbed soil samples were collected from various locations and depths, with select soil samples submitted for laboratory geotechnical testing. Prior to the start of subsurface investigation activities, New York One Call (811) service was contacted for utility mark-out, as was a private utility contractor, Blood Hound Underground Utility Locators.

The subsurface investigation was performed in general accordance with current American Society for Testing and Materials (ASTM) International standards. Subsurface investigation activities were performed between March 3 and March 7, 2025. Full-time field oversight, sample collection, visual soil classification and boring log services were provided by Arcadis. The drilling work was conducted by Land, Air, Water Environmental Services, Inc. of Center Moriches, New York. Laboratory testing was conducted by GeoTesting Express, Inc. in Acton, Massachusetts.

All personnel utilized Occupational Safety and Health Administration (OSHA) Level D personal protective equipment (hard hats, steel toed boots, reflective vests, gloves) while on-site.

3.1 Geotechnical Drilling and Sampling

Nine standard penetration test (SPT) borings (SB-1 through SB-9) were advanced to depths between 42 and 52 feet below ground surface (ft bgs). The borings were advanced with a track-mounted drill rig using direct push (at

borings SB-7 and SB-9 only) and hollow-stem auger (HSA) drilling techniques per ASTM D6151. Continuous split spoon sampling was performed to 15 feet, followed by sampling every 5 feet to boring terminal depth.

Standard penetration test blow counts and split-spoon samples were collected using a standard 2-inch outside diameter split-spoon sampler, 24-inches long, and driven by a 140-pound hammer with a 30-inch drop per ASTM D1586. The N-values shown on the boring logs represent the number of blows required for 1-foot penetration into the soil after an initial 6-inch "seating" drive depth. Disturbed soil samples were collected for material property testing in the laboratory after initial visual classification in the field per ASTM D2488.

Approximate boring locations are shown on **Figure 2.** Boring logs, including description and classification of encountered soils, as well as SPT N-values, are provided in **Appendix A**.

3.2 Geotechnical Laboratory Testing

Select soil samples collected from each boring were submitted for laboratory analyses to assist in the classification of the subsurface strata and for use in establishing engineering properties of the materials encountered. The following laboratory tests were performed in accordance with the ASTM standards. Results of the laboratory testing are included in **Appendix B**.

- Soil Classification (ASTM D2487) – 36 samples
- Moisture Content (ASTM D2216) – 41 samples
- Atterberg Limits (ASTM D4318) – 36 samples
- Grain Size Analysis (ASTM D6913) – 36 samples
- Organic Testing (ASTM D2974) – 8 samples
- Specific Gravity (ASTM D854) – 8 samples

4 Site and Subsurface Conditions

4.1 Geologic Setting

The unconsolidated geologic deposits underlying Suffolk County consist of interbedded clay, silt, sand, and gravel that overlie southward-dipping consolidated bedrock (consists mainly of Precambrian age granite, gneiss, and schist). The overlying unconsolidated sediments were deposited during the Cretaceous age and form, in ascending order, the Raritan and Magothy Formations. During the Pleistocene period, glacial meltwater deposited outwash material forming what is presently known as the Upper Glacial aquifer (King and Beikman 1974).

4.2 Generalized Stratigraphy

The geotechnical investigation provided soil data for the categorization of the engineering properties and to define the generalized variability in the foundation materials. Based on the soil samples from the borings, the site soil is primarily composed of brown sand with varying amounts of silt and gravel, Unified Soil Classification System (USCS) Group Symbols SP. Based upon an initial review of the visual sample descriptions and results of the

laboratory testing, the soils were generalized into two main units: Sands and Gravelly Sands. While these soil units are present across the Site, the depths and thicknesses for each varied between boring locations.

Soils representative of the Sands generally consist of light reddish-brown fine to medium sand with little silt and gravel. Percent fines ranged from 1.4 to 6.0, and percent gravel ranged from 1.0 to 27.7 percent. Recorded N-values ranged from 5 to 51 with an average of 22. N-values and visual observations of the split spoon samples indicate that consistency of this unit is generally medium dense. The Sands unit was observed in all borings and made up most of the encountered soils.

The soil unit of Gravelly Sands is typically a coarser unit than the Sands unit. It generally consists of reddish-brown fine to coarse sands with some fine to medium gravels. Percent fines ranged from 3.4 to 7.8, and percent gravel ranged from 33.1 to 39.3 percent. This unit varied in thickness from approximately 2 to 10 ft and primarily observed in SB-3, SB-4, and SB-5. Gravelly Sands were not observed in SB-2. Depth to Gravelly Sands varied across borings. Recorded N-values ranged from 11 to 105 with an average of 38. N-values and visual observations of the split spoon samples indicate that consistency of Gravelly Sands is generally medium dense to dense.

All soils tested for Atterberg limits were found to be non-plastic. Results of specific gravity ranged from 2.66 to 2.73. Eight samples (that were not related to composting activities on the site) were selected for organic content. Range of organic content varied from 0.0 to 1.3 percent. Fill was identified from about 0 to 3 ft bgs at SB-1, SB-2, SB-3, and SB-4. These four borings were located on or adjacent to asphalt covered areas. Bedrock was not encountered.

4.3 Groundwater Measurement

Groundwater levels based on soil moisture conditions were monitored in the test borings. At the time of drilling, groundwater was encountered at about 48 feet bgs in four of the borings: SB-4, SB-5, SB-6, and SB-9. It is recognized that groundwater levels may vary from what was observed during the field exploration depending on the season and wet weather.

5 Foundation Design Recommendations

A summary of the foundation design recommendations for the proposed structure follows.

5.1 Shallow Foundation Recommendations

For structures supported by shallow foundations, the ultimate bearing capacity of the foundation is dependent on variables such as footing size, loading, settlement limits, and correction factors. Based on local building codes and frost line, the footing must be at a minimum depth of 3 feet bgs.

Two spread footing options were considered for the proposed redevelopment. The first was a strip footing, one having a length to width ratio greater than 10, with an assumed minimum width of 3 feet. For this configuration, a maximum bearing capacity of 1.5 kips per square foot (ksf) is recommended to minimize settlement to less than 0.5 inch. Estimated settlements for a strip footing under the allowable bearing pressure range from approximately 0.4 to 0.5 inches.

The second foundation configuration considered was a square footing, one having a length to width ratio of 1, with an assumed length and width of 5 feet. For this configuration, a maximum bearing capacity of 5.0 ksf is

recommended to minimize settlement to less than 0.5 inch. Estimated settlement for this footing configuration under the allowable bearing pressure ranges from approximately 0.4 to 0.5 inches.

All footings must be sized to safely transmit the applied load to the underlying foundation materials without undergoing excessive deflection or experience cracking and damage. Footings should bear below a reference line drawn upward on a 1.5H:1V slope from the bottom of existing or proposed below grade structures.

5.2 Slabs-on-Grade

Slabs should be designed and reinforced for the anticipated loading conditions using a modulus of subgrade reaction of 125 pounds per cubic inch (pci) where the subgrade is prepared as discussed in Sections 6.2 and 6.3 below.

5.3 Below Grade Foundation Walls

Below grade foundation walls which are restrained at the top and backfilled on one side with compacted general fill should be designed to resist a total static lateral earth pressures calculated on the basis of an equivalent fluid earth pressure of 60 pounds per cubic foot (pcf). Foundation walls should be designed for surcharge loads due to traffic, adjacent structures, and other sources. The additional lateral pressure should be added over the entire height of the wall below the surcharge level, calculated on the basis of 0.5 times the vertical surcharge pressure.

5.4 Seismic Site Coefficient

For development of the Seismic Site Coefficients, the site is considered to have a Class D soil profile per the site class definitions provided in Table 20.3-1 of Chapter 20 of Minimum Design Loads for Buildings and Other Structures, ASCE/SEI 7-10.

6 Construction Considerations

6.1 Excavation

Excavations for foundations or other work, should not undermine existing utilities or structures, and should be made outside of the influence zone of existing structures. The influence zone should be assumed to extend from the bottom, outer edge of an existing foundation at a 1.5H:1V sloped line. If excavations must be made within this zone, soil support such as sheeting, trench boxes or other excavation supports may be required to safely perform the excavation.

The soil is classified as Type C by the OSHA regulations, and for excavations less than 20 feet deep, 34-degree (1.5H:1V) side slopes are acceptable for temporary excavations. Each excavation should be made under the supervision of a qualified individual and the excavation side slopes changed if other soil types are encountered during excavation.

To adequately protect subsurface structures and equipment from damage due to frost action, subsurface structures such as footings should have a minimum embedment depth of 36 inches to protect against frost heave damage and uplift caused by frost action.

6.2 Subgrade Preparation

The soil subgrade surface should be firm, dry, and undisturbed to provide for adequate foundation support. Overburden soils supporting the footings and slab should be overexcavated by a minimum of 1 foot and backfilled with structural fill to provide quality subgrade and uniform bearing conditions for the foundations. Where evidence of weak unsuitable material exists at this depth, the soils should be undercut and replaced with compacted structural fill.

Intermittent silty sands located near the ground surface may be considered moisture sensitive and may become soft or unstable when saturated, disturbed or under dynamic forces. Water should not be allowed to collect in excavations or on prepared subgrades for spread footings or floor slabs during construction. Positive site drainage should be maintained throughout construction activities. Due to depth to groundwater, dewatering, outside of stormwater control, is not anticipated to be needed to construct shallow foundations. Care must be taken to preserve the final bearing surface including waiting to excavate until immediately prior to placing concrete foundations. Until the subgrade surface is protected by placement of aggregate, incidental traffic of workers and equipment across the subgrade should be prohibited. Disturbed subgrade surfaces should be excavated to undisturbed soils.

Final subgrade observations should be made by a geotechnical engineer prior to placing compacted fill materials.

6.3 Fill Materials and Placement

6.3.1 General Fill

General fill should consist of clean common earth fill, free from excessive moisture, organic material, coatings, sharp angular stones, unsatisfactory fills, and other deleterious materials. It shall conform to the Soil Classification Groups GW, GP, GM, SW, SP, and SM (as determined by ASTM D2487), or a combination of these groups, with no stones larger than 2 inches in diameter, no more than 35 percent fines (passing the No. 200 sieve) and a Plasticity Index less than 10. The on-site soils meeting this requirement may be used as general fill for foundation backfill.

Excavated materials must be properly handled and protected from becoming wet to prevent difficulties with placement of the soils back into the excavation areas as reusable fill material. In addition, it is not recommended that the silty materials be used where free-draining materials are desired, such as backfill for below-grade foundation walls.

6.3.2 Structural Fill

Compacted structural fill for foundations and floor support should be placed after removal of organic material, topsoil, vegetation, construction debris, and any soft surface soils. Material for structural fill shall generally consist of clean gravelly sand or sandy gravel, well graded, within the following limits:

Sieve	Percent Passing
3 inch	100
No. 10	30 – 70
No. 40	10 – 40

Sieve	Percent Passing
No. 200	0 - 10

6.3.3 Compaction

Controlled fill shall be placed in horizontal, successive, uniform layers having a maximum uncompacted (loose) lift thickness of 9 inches. This thickness specification shall be used in all areas when/if a large vibratory compactor is used to compact the fill. In restricted areas where smaller, hand-guided equipment is used to densify the soil, a lift thickness of 6 inches of uncompacted fill shall be regarded as the maximum allowed. The first lift shall be placed over a proof-rolled and accepted surface. Each lift shall be uniformly and evenly blade-mixed during spreading to ensure uniformity of the material in each layer. If the work deteriorates prior to placement of the next lift, the layer shall be recompacted and reshaped accordingly. The finished surface shall be properly graded to a relatively smooth surface with no sharp or protruding objects.

Each lift should be compacted with a minimum of 4 coverages of the equipment described above. The following minimum percent compaction requirements are:

- General Fill: 92 percent of maximum dry density per ASTM D1557
- Structural Fill: 95 percent of maximum dry density per ASTM D1557

All fill material should be maintained, placed, and compacted at ±2 percent of the optimum moisture content to attain the required degree of compaction. Compacted fill placement for floor and foundation support should be conducted under the observation of a geotechnical engineer.

6.3.4 Quality Control Testing of Compaction

Successive lifts of compacted fill shall not be placed until the layer under construction has been compacted to the required density, as measured by a geotechnical engineer or qualified soils technician working under the direction of a geotechnical engineer. Density testing shall be performed using a nuclear density gauge, or equivalent, at a frequency of one test per 3,500 square feet per soil lift area to help verify level of compaction in accordance with ASTM D6938. In fill areas less than 3,500 square feet in size or linear fills (e.g., for column footings or strip footings), each isolated fill lift shall be tested and each linear fill lift shall be tested not less than once per 50 lineal feet. Any soft, yielding, organic, deleterious fill materials or otherwise unacceptable areas detected during compaction efforts shall be over-excavated and replaced.

6.3.5 Acceptance of Backfill Materials

Any material used for structural and/or general fill shall be observed and approved for use by a geotechnical engineer prior to use on the project site. Geotechnical testing consisting of sieve analysis, moisture content and Atterberg limits shall be performed and submitted to the geotechnical engineer prior to approval of backfill material. Sieve analysis shall be performed in accordance with ASTM D6913. Moisture content shall be performed in accordance with ASTM D2216. Atterberg Limits shall be performed in accordance with ASTM D4318. At the direction of the geotechnical engineer, soil samples shall be taken from the excavation area periodically during construction and subjected to Modified Proctor (ASTM D1557) testing to confirm compaction.

7 Limitations

This preliminary report has been prepared by Arcadis for the Town of Islip to present the observations and findings of the geotechnical investigation. This report is not intended for use by others and is not applicable to other sites. This report was prepared in accordance with generally accepted geotechnical engineering practices; no warranty, expressed or implied, is made. The observations, interpretations, findings, and recommendations presented in this report are based on the limited information collected during the field exploration and laboratory testing program. The results described in this report reflect subsurface conditions only at the specific locations and to the depths explored at the time of the field exploration. Subsurface conditions at other locations on site may differ from conditions observed at the boring locations. Likewise, subsurface conditions, including soil conditions, water levels, and others, may be affected by, among other things, the passage of time, manmade events such as construction on or adjacent to the project site, or by natural events such as floods, earthquakes, or groundwater fluctuations. Therefore, actual subsurface conditions may differ, significantly, from those indicated in this report. An attempt has been made to provide for normal contingencies, but the possibility remains that unexpected conditions may be encountered during construction. An allowance should be established to account for possible additional costs that may be required to construct foundations and earthwork as recommended herein. Additional costs may be incurred for various reasons, including variation of soil between borings, variation of weathered rock and competent rock depths, extra depth of soil between borings, extra depth of soil excavation and compacted fill, borrow soils, and difficult excavation.

Hence, recommendations in this report can only be finalized after observing actual subsurface conditions. If conditions encountered during subsequent work differ from those described in this report, the conclusions of this report should be re-evaluated by Arcadis. Arcadis is not responsible for any claims, damages or liability associated with interpretation of subsurface data by others or reuse of the subsurface data or engineering analyses without the express written authorization of Arcadis.

8 References

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American Society for Testing and Materials, "Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) [D2488]," 2009.

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Figures

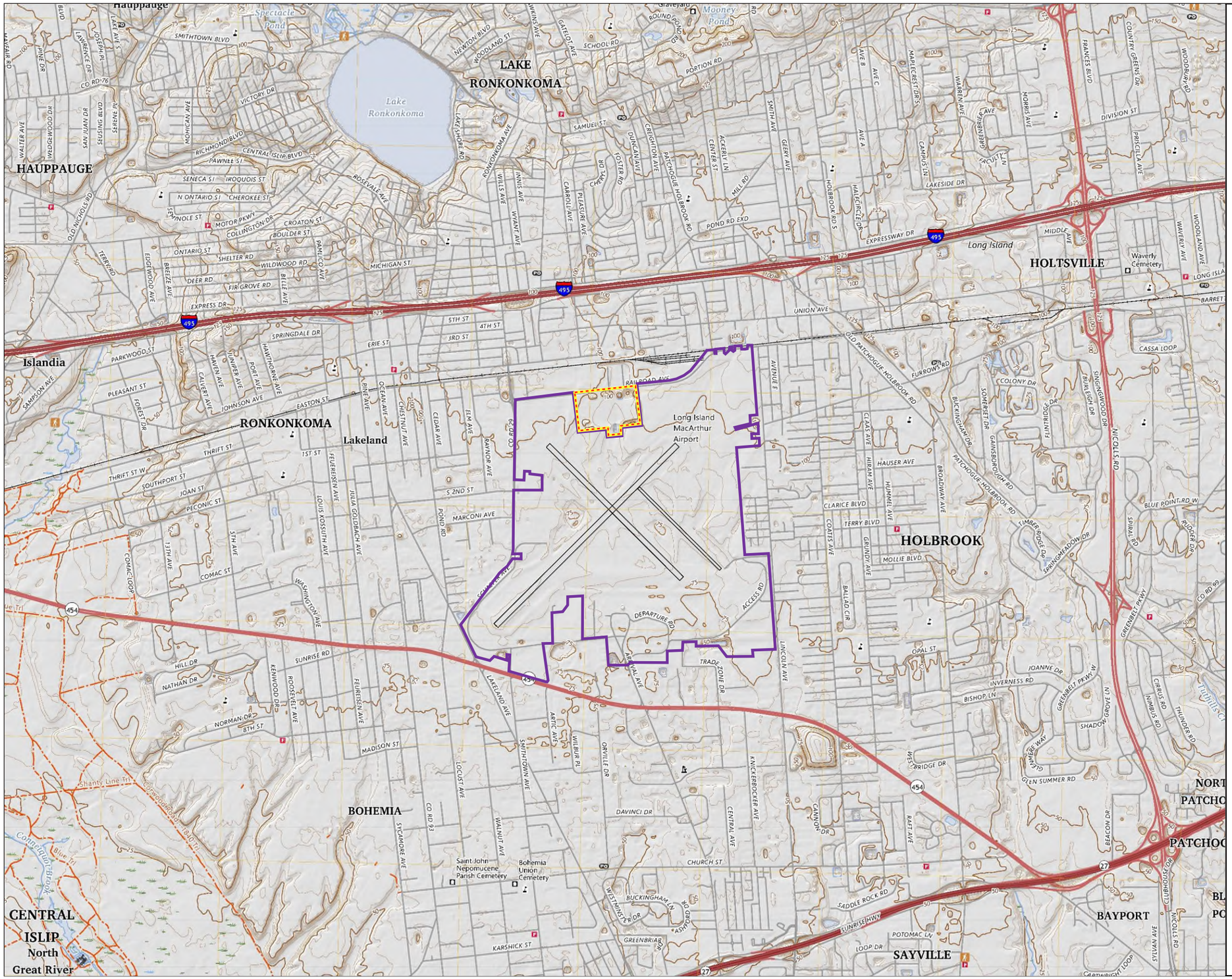

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Figure 1
Site Location

ISP Compost Facility
Ronkonkoma, New York

Approximate Boundary of Long Island MacArthur Airport

Approximate Site Location

0 1
Miles

0 1000 2000 3000 4000
Feet

N

Source: USGS 7.5-minute Series Topographic Quadrangle, April 2025

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Figure 2
Geotechnical Investigation Locations

Town of Islip
Compost Facility
Ronkonkoma, New York

Approximate Boring Locations

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Source: Approximate boring locations collected at completion of field investigation using a handheld Trimble Geo7X GPS
Google Earth Imagery Date: 6/17/2023

Appendix A

Boring Logs

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-1

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York
DATE STARTED 03/07/25 **COMPLETED** 03/07/25
GROUND ELEVATION 97 ft **HOLE SIZE** 5 in
DRILLING CONTRACTOR Land, Air, Water Enviro. Services
NORTHING 40.805714 ft **EASTING** -73.103528 ft
DRILLING METHOD Hollow Stem Auger
GROUNDWATER AT TIME OF DRILLING Depth +/- ---
LOGGED BY M. Tucker **CHECKED BY**
GROUNDWATER AFTER DRILLING ---
SAMPLING METHODS 2 in. O.D. split spoon, 140 lb. hammer with 30 in. drop
WEATHER Mid 40s, windy

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
	0		ASPHALT						
95			SILTY SAND (SM); Very dense, reddish brown, very fine to fine sand, some silt, trace fine gravel, subangular to subrounded, trace clay, trace organics (roots), moist, rock in tip of sampler	SS-1	50	10-13-19 (23)	NP	38.1	1.3
			Coarse gravel and rock fragments at top of sample SAND (SP); Dense, light reddish brown, very fine to medium sand, subangular to subrounded, few fine to coarse gravel, subangular to round, moist	SS-2	65	21-14-15-15 (29)			
	5		GRAVELLY SAND (SP); Very dense, light reddish brown, very fine to medium sand, subangular to subrounded, some fine to coarse gravel, subangular to rounded, few silt, moist – Rock fragments at +/- 4.4' to 4.5'	SS-3	55	11-37-39-34 (76)	NP	7.8	
90			– Rock fragments at +/- 6.0' to 6.1' – Rock fragments at +/- 6.4' to 6.5' – Rock fragments at +/- 7.2' to 7.3'	SS-4	75	41-42-39-26 (81)			
			SAND WITH GRAVEL (SP); Medium dense, reddish brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to subrounded, moist	SS-5	20	7-13-14-15 (27)			
	10		– Little to few gravel, very light brownish grey	SS-6	70	11-9-9-10 (18)			
85			– Very light reddish brown	SS-7	60	10-10-8-8 (18)			
	15			SS-8	15	9-11-11-13 (22)			
80									

SPT N VALUE
20 40 60 80
PL MC LL
20 40 60 80
FINES CONTENT (%)
20 40 60 80

(Continued Next Page)

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290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-1

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
			– Very light reddish brown *(continued)*						
	20		SAND (SP); Very dense to dense, very light reddish brown, fine to medium sand, subangular to subrounded, few fine to coarse gravel, subangular to rounded, moist, orange staining in bands	SS-9	80	5-7-8-10 (15)			
75									
	25		– Rock fragments at +/- 25' – very light brownish grey	SS-10	55	10-12-9-11 (21)			
70									
	30			SS-11	85	8-11-18-23 (29)			
65									
	35		SAND WITH GRAVEL (SP); Medium dense, very light brownish grey, fine to medium sand, angular to subrounded, little fine to coarse gravel, subangular to round, trace silt, moist, rock fragments in tip of sampler	SS-12	55	5-6-12-22 (18)	NP	3.0	
60									

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-1

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
			SAND WITH GRAVEL (SP); Medium dense, very light brownish grey, fine to medium sand, angular to subrounded, little fine to coarse gravel, subangular to round, trace silt, moist, rock fragments in tip of sampler *(continued)*						
	40		– Rock fragments at +/- 40.0' to 40.15'	SS-13	55	19-18-14-15 (32)			
55									
	45		– Light brownish grey						
			SAND (SP); Dense, light brownish grey, very fine to fine sand, trace medium to coarse sand, subangular to subrounded, moist, orange staining in bands	SS-14	85	10-13-13-16 (26)	NP	4.0	
50									
	50		SAND (SW); light red-brown grey, very fine to coarse sand, subangular to subrounded, few fine to coarse gravel, subangular to rounded, moist, rock fragments in tip of sampler	SS-15	25	19-31-44-46 (75)			
45			Borehole terminated at 52 ft depth						

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

GENERAL NOTES:
1. Abbreviations: O.D. = outer diameter, ft = feet, in = inches, lb = pound, SS = split spoon
2. Depths are recorded from ground surface.
3. Soil identification based on visual-manual methods as practiced by Arcadis.

ARCADIS Design & Consultancy for natural and built assets

290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-2

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York
DATE STARTED 03/06/25 **COMPLETED** 03/06/25
GROUND ELEVATION 96 ft **HOLE SIZE** 5 in
DRILLING CONTRACTOR Land, Air, Water Enviro. Services
NORTHING 40.804572 ft **EASTING** -73.103866 ft
DRILLING METHOD Hollow Stem Auger
GROUNDWATER AT TIME OF DRILLING Depth +/- ---
LOGGED BY M. Tucker **CHECKED BY**
GROUNDWATER AFTER DRILLING ---
SAMPLING METHODS 2 in. O.D. split spoon, 140 lb. hammer with 30 in. drop
WEATHER High 40s, windy

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
95	0		GRAVEL WITH SAND AND SILT (GP); Dense, very dark brown, fine to coarse gravel, angular to subangular, little fine to coarse sand, subangular to subrounded, little silt, moist, some debris (wood, brick, asphalt) [Fill], rock in tip	SS-1	55	14-23-5-12 (28)			
			SILTY SAND (SM); Dense, reddish brown, very fine to medium sand, subangular to subrounded, some silt, few fine to coarse gravel, subangular to rounded, trace clay, moist, trace organics (roots)	SS-2	100	19-10-9-6 (19)	NP	22.9	
	5		– Medium dense, greyish reddish brown	SS-3	60	2-2-1-4 (3)	NP	40.5	0.8
90			SAND WITH GRAVEL (SP); Dense, light reddish brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to rounded, moist	SS-4	75	5-6-8-14 (14)			
			– Rock fragments at +/- 8.7' (cobble) – Strong reddish brown staining at +/- 10' to 10.8'	SS-5	50	9-13-21-20 (34)			
	10								
85			SAND (SP); Medium dense, light reddish brown, very fine to medium sand, subangular to subrounded, few fine to coarse gravel, subangular to subrounded, moist	SS-6	60	15-15-13-12 (28)			
			SAND WITH GRAVEL (SP); Medium dense, very light reddish brown, very fine to fine sand, little fine to coarse gravel, subangular to subrounded, moist, reddish brown staining in bands at +/-12.7' to 14'	SS-7	50	8-9-9-9 (18)			
	15		SAND (SP); Loose, reddish brown, very fine sand, trace silt, little mica, moist	SS-8	60	8-11-8-8 (19)	NP	3.6	
80			SAND WITH GRAVEL (SP); Medium dense, very light reddish brown, very fine to fine sand, little fine to coarse gravel, subangular to subrounded, moist						

SPT N VALUE 20 40 60 80
PL MC LL 20 40 60 80
FINES CONTENT (%) 20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-2

CLIENT Town of Islip **PROJECT NAME** Compost Facility, Long Island MacArthur Airport (ISP)

PROJECT NUMBER 30263237 **PROJECT LOCATION** Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
			SAND WITH GRAVEL (SP); Medium dense, very light reddish brown, very fine to fine sand, little fine to coarse gravel, subangular to subrounded, moist *(continued)*						
	20								
75			SAND WITH GRAVEL (SW); Dense, light reddish brown, very fine to medium sand, little fine to coarse gravel, subangular to rounded, moist, orange staining at +/- 20.5' to 20.6'	SS-9	80	9-13-15-13 (28)			
			SAND (SP); Dense, very light reddish brown, very fine sand, trace fine gravel, subangular to subrounded, moist, orange staining in bands						
			SAND WITH GRAVEL (SW); Dense, light reddish brown, very fine to medium sand, little fine to coarse gravel, subangular to rounded, moist						
	25								
70			SAND WITH GRAVEL (SP); Medium dense, light reddish brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to rounded, moist	SS-10	60	10-12-12-11 (24)			
	30								
65			SAND (SP); Medium Dense, light reddish brown, very fine to medium sand, angular to subrounded, trace fine gravel, subangular to subrounded, trace silt, moist, orange and brown staining in bands	SS-11	50	10-14-12-12 (26)	NP	3.8	0
	35								
60			SAND WITH GRAVEL (SW); Dense, very light reddish brown, very fine to coarse sand, angular to subrounded, fine to coarse gravel, subangular to rounded, trace silt, moist	SS-12	60	19-20-17-16 (37)			

▲ SPT N VALUE ▲ 20 40 60 80

PL MC LL 20 40 60 80

☐ FINES CONTENT (%) ☐ 20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-2

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
	40		SAND WITH GRAVEL (SW); Dense, very light reddish brown, very fine to coarse sand, angular to subrounded, fine to coarse gravel, subangular to rounded, trace silt, moist *(continued)*						
55				SS-13	15	14-16-18-19 (34)			
	45								
50				SS-14	70	11-13-14-15 (27)			
	50								
45			SAND (SP); Medium dense, light reddish brown, very fine to fine sand, trace silt, moist	SS-15	80	14-14-12-12 (26)			
			Borehole terminated at 52 ft depth						

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

GENERAL NOTES:
1. Abbreviations: O.D. = outer diameter, ft = feet, in = inches, lb = pound, SS = split spoon
2. Depths are recorded from ground surface.
3. Soil identification based on visual-manual methods as practiced by Arcadis.

ARCADIS Design & Consultancy for natural and built assets

290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-3

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York
DATE STARTED 03/06/25 **COMPLETED** 03/06/25
GROUND ELEVATION 95 ft **HOLE SIZE** 5 in
DRILLING CONTRACTOR Land, Air, Water Enviro. Services
NORTHING 40.803726 ft **EASTING** -73.103556 ft
DRILLING METHOD Hollow Stem Auger
GROUNDWATER AT TIME OF DRILLING Depth +/- ---
LOGGED BY M. Tucker **CHECKED BY**
GROUNDWATER AFTER DRILLING ---
SAMPLING METHODS 2 in. O.D. split spoon, 140 lb. hammer with 30 in. drop
WEATHER High 40s, windy

ELEVATION (ft)	DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
95	0	ASPHALT						
		SILTY SAND (SM); Very dense, dark brown, very fine to medium sand, subangular to subrounded, some silt, few fine to coarse gravel, subangular to subrounded, trace clay, moist [fill]	SS-1	80	29-23-11 (52)			
		GRAVELLY SAND (SW); Medium dense, reddish brown, very fine to coarse sand, subangular to subrounded, some fine to coarse gravel, subangular to rounded, trace silt, moist	SS-2	65	8-8-9-13 (17)	NP	26.5	0.8
		ROCK FRAGMENTS (cobbles)						
90	5	SAND WITH GRAVEL (SP); Medium dense, reddish brown, very fine to coarse sand, subangular to subrounded, little fine to coarse gravel, subangular to subrounded, few silt, moist	SS-3	55	12-25-23-18 (48)	NP	6.0	
		– Grey green mottling, metallic odor GRAVELLY SAND (SW); Dense, light reddish brown, very fine to coarse sand, subangular to rounded, some fine to coarse gravel, subangular to rounded, trace silt, moist, orange staining +/- 6.25' to 6.4'	SS-4	70	20-19-18-19 (37)			
		– Rock fragments at +/- 8.0' to 8.2' (cobble)	SS-5	35	16-28-29-18 (57)			
85	10		SS-6	40	17-13-13-12 (26)			
			SS-7	10	15-16-14-13 (30)			
		– Large rock fragment in tip SAND (SP); Medium dense, light reddish brown, very fine to medium sand, subangular to subrounded, few fine to coarse gravel, subangular to rounded, moist, reddish brown staining in bands	SS-8	75	6-6-9-10 (15)			
80	15							

SPT N VALUE: 20 40 60 80
PL MC LL: 20 40 60 80
FINES CONTENT (%): 20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-3

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
			SAND (SP); Medium dense, light reddish brown, very fine to medium sand, subangular to subrounded, few fine to coarse gravel, subangular to rounded, moist, reddish brown staining in bands *(continued)*						
75	20		SAND WITH GRAVEL (SP); Medium dense, light reddish brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to round, trace silt, moist, trace angular rock fragments	SS-9	85	9-11-11-13 (22)	NP	3.2	
70	25		SAND (SP); Dense, very light reddish brown, very fine to fine sand, few silt, trace fine gravel, subangular to subrounded, moist, trace mice, very dark brown and orange staining in bands	SS-10	80	10-10-11-9 (21)			
65	30		GRAVELLY SAND (SW); Medium dense, light reddish brown, very fine to coarse sand, angular to subrounded, some fine to coarse gravel, subangular to rounded, trace silt, moist, trace coal at tip – Very light yellowish grey	SS-11	70	8-9-11-12 (20)			
60	35		SAND (SP); Medium dense, very light yellowish grey, very fine to fine sand, trace fine to coarse gravel, subangular to subrounded, moist – Dark brown staining in bands	SS-12	90	6-7-10-14 (17)			

SPT N VALUE: 20 40 60 80
PL MC LL
20 40 60 80
FINES CONTENT (%)
20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
55	40		– Dark brown staining in bands *(continued)*						
			SAND WITH GRAVEL (SP); Very dense, light reddish brown, very fine to fine sand, little fine to coarse gravel, subangular to rounded, few rock fragments, trace silt, moist	SS-13	75	19-17-18-20 (35)			
50	45		SAND (SP); Dense to very dense, very light reddish brown, very fine to fine sand, trace fine gravel, subangular to subrounded, trace silt, moist, little gravel at tip	SS-14	80	16-19-21-19 (40)	NP	5.1	
45	50		SAND WITH GRAVEL (SP); Very dense, light reddish brown to light grey, very fine to coarse sand, angular to subrounded, little fine to coarse gravel, subangular to rounded, trace silt, moist	SS-15	75	18-22-16-15 (38)			
			Borehole terminated at 52 ft depth						

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

GENERAL NOTES:
1. Abbreviations: O.D. = outer diameter, ft = feet, in = inches, lb = pound, SS = split spoon
2. Depths are recorded from ground surface.
3. Soil identification based on visual-manual methods as practiced by Arcadis.

ARCADIS Design & Consultancy for natural and built assets

290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-4

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York
DATE STARTED 03/04/25 **COMPLETED** 03/04/25
GROUND ELEVATION 94 ft **HOLE SIZE** 5 in
DRILLING CONTRACTOR Land, Air, Water Enviro. Services
NORTHING 40.80596 ft **EASTING** -73.100814 ft
DRILLING METHOD Hollow Stem Auger
GROUNDWATER AT TIME OF DRILLING Depth +/- 51.50 ft / Elev 42.50 ft
LOGGED BY M. Tucker **CHECKED BY**
GROUNDWATER AFTER DRILLING ---
SAMPLING METHODS 2 in. O.D. split spoon, 140 lb. hammer with 30 in. drop
WEATHER High 30s, windy

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
	0		SILTY SAND WITH GRAVEL (SM); Medium dense, very dark brown, very fine to medium sand, some silt, little fine to coarse gravel, subangular to subrounded, moist, organic (compost)	SS-1	85	9-37-40-21 (77)			
			– 1" weathered asphalt at +/- 0.7'						
			SAND WITH SILT AND GRAVEL (SP-SM); Very dense, brown, very fine to medium sand, little silt, little fine to coarse gravel, angular to subrounded, few debris (brick, concrete), trace clay, moist [fill]						
			SILTY SAND WITH GRAVEL (SM); brown, very fine to medium sand, some silt, little fine to coarse gravel, subangular to rounded, moist, rock in tip	SS-2	40	12-15-17-24 (32)			
90									
	5		– Very dense, very dark brown	SS-3	40	26-22-19-15 (41)	NP	3.3	
				SS-4	25	16-20-16-14 (36)			
85			SAND WITH GRAVEL (SP); Medium dense, very light brown, fine to coarse gravel, subangular to subrounded, little fine to coarse gravel, subangular to rounded, trace silt, moist	SS-5	65	6-6-8-7 (14)			
	10		SAND (SP); Medium dense, very light brown with orange stained bands, very fine to medium sand, few fine to coarse gravel, subangular to subrounded, moist	SS-6	55	7-7-9-9 (16)			
			SAND WITH GRAVEL (SP); Dense, very light brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to rounded, trace silt, moist	SS-7	85	10-8-8-8 (16)			
80									
	15			SS-8	5	13-14-13-14 (27)			

SPT N VALUE 20 40 60 80

PL MC LL 20 40 60 80

FINES CONTENT (%) 20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-4

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
75	20		SAND WITH GRAVEL (SP); Dense, very light brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to rounded, trace silt, moist *(continued)*						
			GRAVELLY SAND (SP); Medium dense, very light brown, very fine to medium sand, subangular to subrounded, some fine to coarse gravel, subangular to round, moist	SS-9	45	9-15-20-19 (35)	NP	5.2	
70	25		No Recovery	SS-10	0	11-15-17-17 (32)			
65	30		SAND WITH GRAVEL (SP); Dense, very light brown, very fine to coarse sand, subangular to subrounded, little fine to coarse gravel, subangular to rounded, moist	SS-11	95	7-11-11-9 (22)	NP	2.2	0.1
60	35		SAND (SP); Dense, very light brown, very fine to coarse sand, subangular to subrounded, few fine to coarse gravel, subangular to subrounded, moist, rock fragments in tip	SS-12	65	13-15-22-26 (37)	NP	3.3	

SPT N VALUE: 20 40 60 80
PL MC LL
20 40 60 80
FINES CONTENT (%)
20 40 60 80

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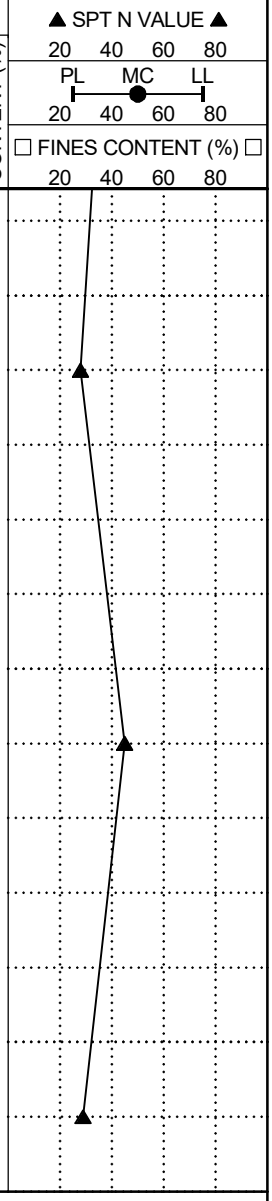
ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
55			SAND (SP); Dense, very light brown, very fine to coarse sand, subangular to subrounded, few fine to coarse gravel, subangular to subrounded, moist, rock fragments in tip *(continued)*						
	40		GRAVELLY SAND (SP); Dense, light reddish brown, very fine to coarse sand, angular to subrounded, some fine to coarse gravel, subangular to rounded, moist	SS-13	80	12-14-14-16 (28)			
			SAND (SP); Dense, light reddish brown, very fine to fine sand, few fine to coarse gravel, subangular to subrounded, trace silt, moist						
50									
	45		– ROCK FRAGMENTS						
			SAND WITH GRAVEL (SP); light reddish brown, very fine to coarse sand, angular to subrounded, little fine to coarse gravel, angular to subrounded, trace silt, moist	SS-14	35	16-23-22-26 (45)			
45									
	50		SAND (SW); Very dense, light reddish brown, very fine to coarse sand, subangular to subrounded, few fine to coarse gravel, subangular to surrounded, trace silt, moist	SS-15	85	11-15-14-22 (29)			
			GRAVELLY SAND (SW); Very dense, light reddish brown, fine to coarse sand, angular to subrounded, some fine to coarse gravel, subangular to subrounded, wet at 51.5', fast draining						
			Borehole terminated at 52 ft depth						



GENERAL NOTES:
1. Abbreviations: O.D. = outer diameter, ft = feet, in = inches, lb = pound, SS = split spoon
2. Depths are recorded from ground surface.
3. Soil identification based on visual-manual methods as practiced by Arcadis.

BORING NO. SB-5

ARCADIS Design & Consultancy for natural and built assets

290 Broadhollow Road, Suite 307E, Melville, NY 11747

CLIENT Town of Islip

PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)

PROJECT NUMBER 30263237

PROJECT LOCATION Ronkonkoma, New York

DATE STARTED 03/05/25 **COMPLETED** 03/05/25

GROUND ELEVATION 90 ft **HOLE SIZE** 5 in

DRILLING CONTRACTOR Land, Air, Water Enviro. Services

NORTHING 40.805069 ft **EASTING** -73.10081 ft

DRILLING METHOD Hollow Stem Auger

GROUNDWATER AT TIME OF DRILLING Depth +/- 48.00 ft / Elev 42.00 ft

LOGGED BY M. Tucker **CHECKED BY**

GROUNDWATER AFTER DRILLING ---

SAMPLING METHODS 2 in. O.D. split spoon, 140 lb. hammer with 30 in. drop

WEATHER High 40s, windy

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
90	0		SILTY SAND WITH GRAVEL (SM); Dense, dark brown, very fine to medium sand, angular to subrounded, some silt, little fine to coarse gravel, subangular to rounded, trace brick, moist, trace organics	SS-1	55	7-10-12-10 (22)			
			GRAVELLY SAND (SP); Very dense, reddish brown, very fine to medium sand, some fine to coarse gravel, subangular to subrounded, few silt, moist						
			– Medium dense	SS-2	50	8-9-12-14 (21)	NP	2.8	
85	5			SS-3	30	10-12-13-12 (25)			
				SS-4	65	12-13-12-13 (25)			
			SAND (SP); Dense, light reddish brown, very fine to medium sand, subangular to subrounded, few fine to coarse gravel, subangular to subrounded, moist, orange staining at +/- 8.5' to 8.7'	SS-5	65	7-6-6-6 (12)			
80	10			SS-6	70	6-8-8-8 (16)			
			– Little silt	SS-7	80	7-8-11-11 (19)			
			SAND (SW); Very dense, light reddish brown, very fine to coarse sand, subangular to subrounded, trace fine gravel, subangular to subrounded, trace silt, moist	SS-8	80	8-9-12-16 (21)	NP	1.9	
75	15		GRAVELLY SAND (SP); Dense, light reddish brown, very fine to coarse sand, subangular to subrounded, some fine to coarse gravel, subangular to subrounded, moist						

SPT N VALUE: 20 40 60 80

PL MC LL: 20 40 60 80

FINES CONTENT (%): 20 40 60 80

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ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-5

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
70	20		GRAVELLY SAND (SP); Dense, light reddish brown, very fine to coarse sand, subangular to subrounded, some fine to coarse gravel, subangular to subrounded, moist *(continued)*						
				SS-9	65	6-5-7-8 (12)			
65	25		SAND WITH GRAVEL (SP); Medium dense, light reddish brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to rounded, moist	SS-10	70	12-15-15-11 (30)	NP	5.4	
60	30			SS-11	10	12-14-18-22 (32)			
55	35		SAND (SP); Dense, light reddish brown, very fine to coarse sand, subangular to subrounded, trace fine gravel, subangular to subrounded, trace silt, moist	SS-12	80	16-13-13-15 (26)			

SPT N VALUE
20 40 60 80
PL MC LL
20 40 60 80
FINES CONTENT (%)
20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-5

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
50	40		SAND (SP); Dense, light reddish brown, very fine to coarse sand, subangular to subrounded, trace fine gravel, subangular to subrounded, trace silt, moist *(continued)*						
			SAND WITH GRAVEL (SP); Very dense, light reddish brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to subrounded, trace silt, trace cobbles, moist	SS-13	65	14-18-22-19 (40)	NP	4.2	
45	45			SS-14	5	15-19-17-17 (36)			
			▽ – Wet at 48'						
40	50		GRAVELLY SAND (SW); Very dense, light reddish brown, very fine to coarse sand, subangular to subrounded, some fine to coarse gravel, subangular to rounded, trace silt, wet (fast draining)	SS-15	100	11-15-17-15 (32)			
			Borehole terminated at 52 ft depth						

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

GENERAL NOTES:
1. Abbreviations: O.D. = outer diameter, ft = feet, in = inches, lb = pound, SS = split spoon
2. Depths are recorded from ground surface.
3. Soil identification based on visual-manual methods as practiced by Arcadis.

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-6

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York
DATE STARTED 03/05/25 **COMPLETED** 03/05/25
GROUND ELEVATION 89 ft **HOLE SIZE** 5 in
DRILLING CONTRACTOR Land, Air, Water Enviro. Services
NORTHING 40.803783 ft **EASTING** -73.101138 ft
DRILLING METHOD Hollow Stem Auger
GROUNDWATER AT TIME OF DRILLING Depth +/- 48.00 ft / Elev 41.00 ft
LOGGED BY M. Tucker **CHECKED BY**
GROUNDWATER AFTER DRILLING ---
SAMPLING METHODS 2 in. O.D. split spoon, 140 lb. hammer with 30 in. drop
WEATHER High 40s, windy

ELEVATION (ft)	DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
	0	SAND WITH SILT AND GRAVEL (SP-SM); Very dense, brown, very fine to medium sand, angular to subrounded, little silt, little fine to coarse gravel, angular to subrounded, moist, trace debris and organics (bricks, wood)	SS-1	65	5-12-19-21 (31)			
		WEATHERED ASPHALT						
		SANDY GRAVEL WITH SILT (GP-GM); Very dense, very dark brown, fine to coarse gravel, subangular to rounded, some fine to coarse sand, subangular to subrounded, little silt, trace organics (wood, roots), moist	SS-2	70	24-31-16-27 (47)			
85								
	5	GRAVELLY SAND (SW); Dense, reddish brown, very fine to coarse sand, subangular to subrounded, some fine to coarse gravel, subangular to subrounded, trace silt, moist	SS-3	55	10-10-16-14 (26)			
		ROCK FRAGMENTS						
		GRAVELLY SAND (SP); Very dense, light reddish brown, fine to medium sand, subangular to subrounded, some fine to coarse gravel, subangular to rounded, trace silt, moist	SS-4	70	16-17-16-12 (33)	NP	3.4	
80			SS-5	5	11-13-13-14 (26)			
	10	SAND (SP); Dense, light reddish brown, fine to medium sand, subangular to subrounded, few fine to coarse gravel, subangular to rounded, trace silt, moist, orange staining in bands	SS-6	70	13-10-9-9 (19)			
		– Greenish grey mottling, metallic odor	SS-7	85	10-10-10-10 (20)	NP	3.1	0.1
75								
	15		SS-8	65	5-5-7-11 (12)			

SPT N VALUE: 20 40 60 80
PL MC LL: 20 40 60 80
FINES CONTENT (%): 20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-6

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
70	20		SAND (SP); Medium dense, light reddish brown, very fine to fine sand, trace fine gravel, subangular to subrounded, trace silt, moist, brown staining in bands	SS-9	65	8-8-9-8 (17)	NP	1.4	
			SANDY GRAVEL (GP); Medium dense, light reddish brown, fine to coarse gravel, subangular to rounded, some very fine to medium sand, trace silt, moist						
			SAND (SP); Medium dense, light reddish brown, very fine to fine sand, trace fine gravel, subangular to subrounded, trace silt, moist, brown staining in bands						
65	25		SAND WITH GRAVEL (SP); Medium dense, very light reddish brown, little fine to coarse gravel, subangular to rounded, few rock fragments, moist	SS-10	80	6-10-11-13 (21)			
60	30		SAND (SP); Dense, light reddish brown, very fine to fine sand, trace fine gravel, subangular to subrounded, moist	SS-11	85	7-8-9-11 (17)			
55	35		SAND WITH GRAVEL (SW); Dense, light reddish brown, very fine to coarse sand, subangular to subrounded, little fine gravel, angular to rounded, moist	SS-12	70	11-11-15-20 (26)			

SPT N VALUE: 20 40 60 80
PL MC LL
20 40 60 80
FINES CONTENT (%)
20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-6

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
50	40		SAND WITH GRAVEL (SW); Dense, light reddish brown, very fine to coarse sand, subangular to subrounded, little fine gravel, angular to rounded, moist *(continued)*						
			SAND (SP); Dense, light reddish brown, very fine to medium sand, subangular to subrounded, trace fine gravel, subangular to subrounded, moist	SS-13	70	11-13-15-17 (28)			
45	45		GRAVELLY SAND (SP); Dense, light reddish brown, very fine to medium sand, subangular to subrounded, some fine to coarse gravel, subangular to rounded, trace silt, moist						
			SAND (SP); Dense, light reddish brown, very fine to fine sand, trace silt, moist	SS-14	35	12-15-15-19 (30)			
40	50		SAND WITH GRAVEL (SP); Very dense, light reddish brown, very fine to coarse sand, subangular to subrounded, little fine to coarse gravel, subangular to rounded, wet (fast draining)	SS-15	55	12-14-16-18 (30)	NP	2.5	
			Borehole terminated at 52 ft depth						

SPT N VALUE: 20 40 60 80
PL MC LL: 20 40 60 80
FINES CONTENT (%): 20 40 60 80

GENERAL NOTES:
1. Abbreviations: O.D. = outer diameter, ft = feet, in = inches, lb = pound, SS = split spoon
2. Depths are recorded from ground surface.
3. Soil identification based on visual-manual methods as practiced by Arcadis.

ARCADIS Design & Consultancy for natural and built assets

290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-7

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York
DATE STARTED 03/03/25 **COMPLETED** 03/03/25
GROUND ELEVATION 92 ft **HOLE SIZE** 5 in
DRILLING CONTRACTOR Land, Air, Water Enviro. Services
NORTHING 40.805851 ft **EASTING** -73.09907 ft
DRILLING METHOD Direct Push with Split Spoon
GROUNDWATER AT TIME OF DRILLING Depth +/- ---
LOGGED BY M. Tucker **CHECKED BY**
GROUNDWATER AFTER DRILLING ---
SAMPLING METHODS 2 in. O.D. split spoon, 140 lb. hammer with 30 in. drop
WEATHER Low 30s, windy

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
	0		SILTY SAND WITH GRAVEL (SM); Dense, very dark brown, very fine to medium sand, some fine to coarse gravel, subangular to subrounded, some silt, little debris (plastic), moist, organic [Compost]	SS-1	50	1-2-3-4 (5)			
90			SAND (SP); Medium dense, reddish brown, very fine to medium sand, subangular to subrounded, trace to few silt, few fine to coarse gravel, subangular to subrounded, moist	SS-2	50	5-5-5-5 (10)			
	5			SS-3	55	3-2-2-3 (4)	NP	4.7	0.5
85			– Few to little coarse gravel	SS-4	60	5-6-4-5 (10)			
			– Rock in tip of sampler	SS-5	50	6-5-8-16 (13)			
	10		SAND (SW); Dense, reddish brown, very fine to coarse sand, trace silt, trace fine gravel, subangular to subrounded, moist – 2" lens of gravel with silt at +/- 12'	SS-6	75	12-14-12-13 (26)			
80			SAND WITH SILT (SP-SM); Dense, reddish brown, very fine to coarse sand, subangular to subrounded, little silt, few fine to coarse gravel, subangular to subrounded, moist	SS-7	75	13-11-11-11 (22)			
			SAND (SP); Dense, light reddish brown, very fine to fine sand, few silt, moist						
	15		SAND WITH GRAVEL (SP); Dense, light reddish brown, fine to coarse sand, subangular to subrounded, little to some fine to coarse gravel, subangular to subrounded, trace silt, moist	SS-8	85	18-15-15-14 (30)			
75									

SPT N VALUE 20 40 60 80
PL MC LL 20 40 60 80
FINES CONTENT (%) 20 40 60 80

(Continued Next Page)

CLIENT Town of Islip

PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)

PROJECT NUMBER 30263237

PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
			SAND WITH GRAVEL (SP); Dense, light reddish brown, fine to coarse sand, subangular to subrounded, little to some fine to coarse gravel, subangular to subrounded, trace silt, moist *(continued)*						
	20		GRAVELLY SAND (SP); Very dense, light reddish brown, very fine to medium sand, subangular to subrounded, some fine to coarse gravel, subangular to rounded, trace silt, moist	SS-9	65	16-17-17-17 (34)	NP	4.3	
70									
	25		– 2" lens of very fine sand with silt at +/- 25.5'						
			SAND (SP); Dense, light brown, very fine to medium sand, subangular to subrounded, few fine to coarse gravel, subangular to subrounded, moist	SS-10	80	9-11-11-14 (22)			
65									
	30		SAND (SP); Medium dense, light brownish grey, fine to medium sand, few fine to coarse gravel, subangular to rounded, trace silt, moist, orange staining in bands	SS-11	65	10-12-12-12 (24)	NP	3.8	
60									
	35		SAND WITH GRAVEL (SP); Dense, light brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to subrounded, moist	SS-12	55	8-17-19-18 (36)	NP	2.8	
55									

SPT N VALUE: 20 40 60 80

PL MC LL: 20 40 60 80

FINES CONTENT (%): 20 40 60 80

(Continued Next Page)

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290 Broadhollow Road, Suite 307E, Melville, NY 11747

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
			SAND WITH GRAVEL (SP); Dense, light brown, very fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to subrounded, moist *(continued)*							
	40		GRAVELLY SAND (SP); Very dense, light brownish grey, fine to coarse sand, subangular to subrounded, some fine to coarse gravel, subangular to subrounded, moist	SS-13	80	18-18-19-23 (37)				
	50		Borehole terminated at 42 ft depth							

GENERAL NOTES:
1. Abbreviations: O.D. = outer diameter, ft = feet, in = inches, lb = pound, SS = split spoon
2. Depths are recorded from ground surface.
3. Soil identification based on visual-manual methods as practiced by Arcadis.

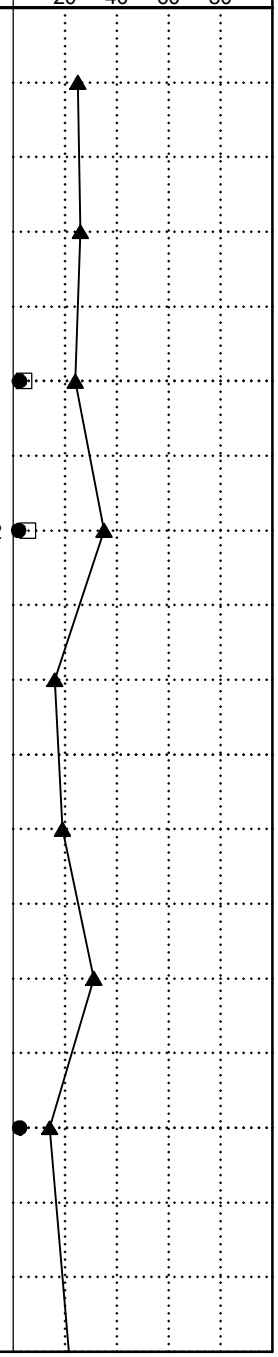
ARCADIS Design & Consultancy for natural and built assets

290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-8

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York
DATE STARTED 03/04/25 **COMPLETED** 03/04/25
GROUND ELEVATION 97 ft **HOLE SIZE** 5 in
DRILLING CONTRACTOR Land, Air, Water Enviro. Services
NORTHING 40.805039 ft **EASTING** -73.098635 ft
DRILLING METHOD Hollow Stem Auger
GROUNDWATER AT TIME OF DRILLING Depth +/- ---
LOGGED BY M. Tucker **CHECKED BY**
GROUNDWATER AFTER DRILLING ---
SAMPLING METHODS 2 in. O.D. split spoon, 140 lb. hammer with 30 in. drop
WEATHER High 30s, windy

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
	0		SILTY SAND WITH GRAVEL (SM); Very dense, very dark brown, very fine to medium sand, subangular to subrounded, some silt, little fine to coarse gravel, subangular to subrounded, few debris (brick, wood), moist	SS-1	65	6-8-17-11 (25)			
95			SAND (SP); Very dense, reddish brown, very fine to medium sand, little fine to coarse gravel, trace silt, moist						
			SAND WITH GRAVEL (SP); Dense, reddish brown, very fine to coarse sand, subangular to subrounded, little fine to coarse gravel, subangular to subrounded, moist, rock in tip of sampler	SS-2	50	10-10-16-19 (26)			
	5		SAND (SP); Medium dense, light reddish brown, very fine to medium sand, few fine gravel, subangular to subrounded, trace silt, moist	SS-3	50	11-12-12-17 (24)	NP	4.3	
90			SAND WITH GRAVEL (SP); Dense, light reddish brown, very fine to medium sand, little to some fine to coarse gravel, subangular to subrounded, trace silt, moist	SS-4	65	18-18-17-19 (35)	NP	5.6	0.2
			SAND (SP); Medium dense, very light reddish brown, very fine to medium sand, subangular to subrounded, few fine to coarse gravel, subangular to rounded, moist	SS-5	55	9-8-8-8 (16)			
	10		SAND WITH GRAVEL (SP); Medium dense, very light reddish brown, very fine to medium sand, subangular to subrounded, little to some fine to coarse gravel, subangular to subrounded, moist	SS-6	70	10-10-9-11 (19)			
85			GRAVELLY SAND (SP); Very dense, reddish brown, very fine to coarse sand, subangular to subrounded, some fine to coarse gravel, subangular to rounded, trace silt, moist	SS-7	65	11-14-17-16 (31)			
	15		SAND (SP); Medium dense, reddish brown to very light reddish brown, fine to coarse sand, subangular to subrounded, few fine gravel, subangular to subrounded, moist	SS-8	55	6-6-8-11 (14)			
80									



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CLIENT Town of Islip **PROJECT NAME** Compost Facility, Long Island MacArthur Airport (ISP)

PROJECT NUMBER 30263237 **PROJECT LOCATION** Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
			SAND (SP); Medium dense, reddish brown to very light reddish brown, fine to coarse sand, subangular to subrounded, few fine gravel, subangular to subrounded, moist *(continued)*						
	20			SS-9	10	12-15-14-14 (29)			
75									
	25		SAND (SP); Dense, light reddish brown, very fine to fine sand, trace silt, moist, orange staining in bands						
			SAND WITH GRAVEL (SP); Very dense, light brownish grey, fine to coarse sand, angular to subrounded, little to some fine to coarse gravel, subangular to rounded, moist	SS-10	75	8-9-10-10 (19)	NP	3.7	
70									
	30			SS-11	75	10-11-13-13 (24)			
65									
	35		SAND (SP); Medium dense, light brownish grey, very fine to fine sand, few fine gravel, subangular to subrounded, moist	SS-12	75	9-10-12-13 (22)			
60									

SPT N VALUE: 20 40 60 80

PL MC LL: 20 40 60 80

FINES CONTENT (%): 20 40 60 80

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BORING NO. SB-8

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
	40		SAND (SP); Medium dense, light brownish grey, very fine to fine sand, few fine gravel, subangular to subrounded, moist *(continued)*						
55			SAND (SP); Medium dense, very light brownish grey, very fine to medium sand, subangular to subrounded, few to little fine to coarse gravel, subangular to rounded, moist	SS-13	70	6-7-9-19 (16)	NP	2.4	
	45								
50				SS-14	65	15-18-20-23 (38)			
	50								
45				SS-15	65	16-17-18-21 (35)			
			Borehole terminated at 52 ft depth						

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

GENERAL NOTES:
1. Abbreviations: O.D. = outer diameter, ft = feet, in = inches, lb = pound, SS = split spoon
2. Depths are recorded from ground surface.
3. Soil identification based on visual-manual methods as practiced by Arcadis.

ARCADIS Design & Consultancy for natural and built assets

290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-9

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York
DATE STARTED 03/03/25 **COMPLETED** 03/03/25
GROUND ELEVATION 95 ft **HOLE SIZE** 5 in
DRILLING CONTRACTOR Land, Air, Water Enviro. Services
NORTHING 40.804139 ft **EASTING** -73.099227 ft
DRILLING METHOD Direct Push with Split Spoon
GROUNDWATER AT TIME OF DRILLING Depth +/- 49.00 ft / Elev 46.00 ft
LOGGED BY M. Tucker **CHECKED BY**
GROUNDWATER AFTER DRILLING ---
SAMPLING METHODS 2 in. O.D. split spoon, 140 lb. hammer with 30 in. drop
WEATHER Low 30s, windy

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
95	0		SILTY SAND WITH GRAVEL (SM); Dense, very dark brown, very fine to medium sand, some to little silt, little fine to coarse gravel, subrounded, few debris (plastic, brick), moist, organics present	SS-1	85	17-12-11-14 (23)			
			SAND WITH GRAVEL (SW); Medium dense, light reddish brown, fine to medium sand, little fine to coarse gravel, subrounded, moist	SS-2	50	16-19-17-14 (36)			
90	5		SAND WITH GRAVEL (SP); Medium dense, light reddish brown, fine to coarse sand, subangular to angular, little fine gravel, subangular, moist	SS-3	75	9-9-8-9 (17)	NP	2.1	
			GRAVELLY SAND (SP); Medium dense, light reddish brown, very fine to coarse sand, some fine to coarse gravel, subangular to subrounded, trace silt, moist	SS-4	50	8-9-9-10 (18)	NP	4.5	
			– Few cobbles	SS-5	60	15-13-14-15 (27)			
85	10		SAND WITH SILT AND GRAVEL (SP-SM); Medium dense, light reddish brown, very fine to coarse sand, subangular to subrounded, little silt, little fine to coarse gravel, angular to subrounded, moist	SS-6	60	17-11-10-11 (21)			
			SAND (SP); Medium dense, brownish white, very fine to medium sand, few fine to coarse gravel, subangular to subrounded, moist	SS-7	65	6-6-8-7 (14)			
80	15		SAND (SP); Dense, light reddish brown, very fine to fine sand, trace silt in bands, moist	SS-8	65	7-7-9-11 (16)	NP	2.8	

SPT N VALUE
20 40 60 80
PL MC LL
20 40 60 80
FINES CONTENT (%)
20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-9

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
75	20		SAND (SP); Dense, light reddish brown, very fine to fine sand, trace silt in bands, moist *(continued)*						
			SAND (SP); Dense, light grey, fine to medium sand, subangular to subrounded, few to little coarse gravel, subrounded, trace silt, moist	SS-9	50	7-11-14-18 (25)			
70	25		SAND WITH GRAVEL (SP); Medium dense, very light grey, fine to medium sand, subangular to subrounded, little fine to coarse gravel, subangular to subrounded, moist	SS-10	70	12-11-8-11 (19)			
65	30		– Dense	SS-11	70	9-9-9-13 (18)			
60	35			SS-12	75	8-9-9-14 (18)			

SPT N VALUE
20 40 60 80
PL MC LL
20 40 60 80
FINES CONTENT (%)
20 40 60 80

(Continued Next Page)

ARCADIS Design & Consultancy for natural and built assets
290 Broadhollow Road, Suite 307E, Melville, NY 11747

BORING NO. SB-9

CLIENT Town of Islip
PROJECT NAME Compost Facility, Long Island MacArthur Airport (ISP)
PROJECT NUMBER 30263237
PROJECT LOCATION Ronkonkoma, New York

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE AND NUMBER	RECOVERY % (RQD%)	BLOW COUNTS (N VALUE)	LAB DATA: PLASTICITY INDEX (%)	LAB DATA: PERCENTAGE FINES (%)	LAB DATA: ORGANIC CONTENT (%)
			– Dense *(continued)*						
55	40			SS-13	75	16-20-21-23 (41)			
50	45			SS-14	75	13-15-18-19 (33)	NP	3.5	
			▽ – Wet at +/- 49'						
45	50		– Medium dense	SS-15	50	6-7-7-6 (14)			
			Borehole terminated at 52 ft depth						

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

GENERAL NOTES:
1. Abbreviations: O.D. = outer diameter, ft = feet, in = inches, lb = pound, SS = split spoon
2. Depths are recorded from ground surface.
3. Soil identification based on visual-manual methods as practiced by Arcadis.

Appendix B

Geotechnical Laboratory Test Results

Appendix B - Geotechnical Laboratory Test Results
ISP Compost Facility
Ronkonkoma, New York

Boring ID	Sample ID	Sample Depth (ft bgs)	Moisture Content (%)	Particle Size			Atterberg Limits			USCS Symbol	Soil Description	Organic Matter (%)	Specific Gravity
				Gravel (%)	Sand (%)	Fines (%)	Liquid Limit	Plastic Limit	Plasticity Index				
			ASTM D2216	ASTM D6913			ASTM D4318					ASTM D2974	ASTM D854
SB-1	SS-1	0-2	8.7	1	60.9	38.1	-	NP	-	SM	Silty SAND	1.3	-
	SS-3	4-6	1.1	39.3	52.9	7.8	-	NP	-	SP-SM	Poorly graded SAND with Silt and Gravel	-	2.67
	SS-12	35-37	2.3	15.5	81.5	3	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
	SS-14	45-47	2.1	26.2	69.8	4	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
SB-2	SS-2	2-4	8	5.9	71.2	22.9	-	NP	-	SM	Silty SAND	-	-
	SS-3	4-6	11.9	0	59.5	40.5	-	NP	-	SM	Silty SAND	0.8	-
	SS-8	14-16	2.4	3	93.4	3.6	-	NP	-	SP	Poorly graded SAND	-	-
	SS-11	30-32	3.4	2.7	93.5	3.8	-	NP	-	SP	Poorly graded SAND	0	-
	SS-14	45-47	2.8	-	-	-	-	-	-	-	-	-	2.66
SB-3	SS-2	2-4	10	4.3	69.2	26.5	-	NP	-	SM	Silty SAND	0.8	-
	SS-3	4-6	1.8	19.1	74.9	6	-	NP	-	SP-SM	Poorly graded SAND with Silt and Gravel	-	-
	SS-9	20-22	3.5	18.5	78.3	3.2	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
	SS-14	45-47	3.8	1.1	93.8	5.1	-	NP	-	SP-SM	Poorly graded SAND with Silt	-	-
SB-4	SS-3	4-6	6.6	27.7	69	3.3	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
	SS-9	20-22	2.1	34.1	60.7	5.2	-	NP	-	SP-SM	Poorly graded SAND with Silt and Gravel	-	-
	SS-11	30-32	2.3	11.4	86.4	2.2	-	NP	-	SP	Poorly graded SAND	0.1	2.73
	SS-12	35-37	2.5	6.2	90.5	3.3	-	NP	-	SP	Poorly graded SAND	-	2.72
SB-5	SS-2	2-4	2.2	24.8	72.4	2.8	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
	SS-3	4-6	2.2	-	-	-	-	-	-	-	-	-	-
	SS-8	14-16	2.7	2.2	95.9	1.9	-	NP	-	SP	Poorly graded SAND	-	-
	SS-10	25-27	3	9.3	85.3	5.4	-	NP	-	SP-SM	Poorly graded SAND with Silt	-	-
	SS-13	40-42	3.2	16.5	79.3	4.2	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
SB-6	SS-4	6-8	3	33.1	63.5	3.4	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
	SS-7	12-14	2.9	11.4	85.5	3.1	-	NP	-	SP	Poorly graded SAND	0.1	-
	SS-9	20-22	2.9	1.6	97	1.4	-	NP	-	SP	Poorly graded SAND	-	2.65
	SS-15	50-52	13.1	19.8	77.7	2.5	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
SB-7	SS-2	2-4	6.6	-	-	-	-	-	-	-	-	-	-
	SS-3	4-6	5.7	7	88.3	4.7	-	NP	-	SP	Poorly graded SAND	0.5	-
	SS-9	20-22	3	34.4	61.3	4.3	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
	SS-11	30-32	3.4	7.8	88.4	3.8	-	NP	-	SP	Poorly graded SAND	-	-
	SS-12	35-37	5	17.6	79.6	2.8	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
SB-8	SS-3	4-6	2.4	6	89.7	4.3	-	NP	-	SP	Poorly graded SAND	-	-
	SS-4	6-8	2.1	23.9	70.5	5.6	-	NP	-	SP-SM	Poorly graded SAND with Silt and Gravel	0.2	-
	SS-8	14-16	2.5	-	-	-	-	-	-	-	-	-	2.68
	SS-10	25-27	3.4	21.1	75.2	3.7	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
	SS-13	40-42	1.5	11.3	86.3	2.4	-	NP	-	SP	Poorly graded SAND	-	2.7
	SS-15	50-52	2.3	-	-	-	-	-	-	-	-	-	-
SB-9	SS-3	4-6	3.8	15	82.9	2.1	-	NP	-	SP	Poorly graded SAND with Gravel	-	2.66
	SS-4	6-8	3.1	25.2	70.3	4.5	-	NP	-	SP	Poorly graded SAND with Gravel	-	-
	SS-8	14-16	3.8	1	96.2	2.8	-	NP	-	SP	Poorly graded SAND	-	-
	SS-14	45-47	2.5	18.1	78.4	3.5	-	NP	-	SP	Poorly graded SAND with Gravel	-	-

General Notes:

- = Indicates that no test was performed.

Unified Soil Classification System definitions:

Fine material: Material passing the No. 200 sieve (less than 75 microns).

Sand: Material passing No. 4 sieve and retained on the No. 200 sieve (less than 4.75 mm and greater than 75 microns).

Gravel: Material retained on the No. 4 sieve (greater than 4.75 millimeters).

Acronyms and Abbreviations

% = percent

ASTM = ASTM International

USCS = Unified Soil Classification System

NP = nonplastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	ajl
Sample ID:	---	Test Date:	03/21/25	Checked By:	ank
Depth :	---	Test Id:	807413		

Moisture Content of Soil and Rock - ASTM D2216

Boring ID	Sample ID	Depth	Description	Moisture Content,%
SB-1	SS- 1	0-2	Moist, dark grayish brown silty sand	8.7
SB-1	SS- 3	4-6	Moist, light yellowish brown sand with silt and gravel	1.1
SB-1	SS- 12	35-37	Moist, pale brown sand with gravel	2.3
SB-1	SS- 14	45-47	Moist, pale brown sand with gravel	2.1
SB-2	SS- 2	2-4	Moist, dark brown silty sand	8.0
SB-2	SS- 3	4-6	Moist, pale brown silty sand	11.9
SB-2	SS- 8	14-16	Moist, yellowish brown sand	2.4
SB-2	SS- 11	30-32	Moist, very pale sand	3.4
SB-2	SS- 14	45-47	Moist, light yellowish brown sand	2.8
SB-3	SS- 2	2-4	Moist, brown silty sand	10.0

Notes: Temperature of Drying : 110º Celsius

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	ajl
Sample ID:	---	Test Date:	03/21/25	Checked By:	ank
Depth :	---	Test Id:	807459		

Moisture Content of Soil and Rock - ASTM D2216

Boring ID	Sample ID	Depth	Description	Moisture Content,%
SB-3	SS- 3	4-6	Moist, yellowsih brown sand with silt and gravel	1.8
SB-3	SS- 9	20-22	Moist, light yellowish brown sand with gravel	3.5
SB-3	SS- 14	45-47	Moist, very pale brown sand with silt	3.8
SB-4	SS- 3	4-6	Moist, very dark brown sand with gravel	6.6
SB-4	SS- 9	20-22	Moist, pale brown sand with silt and gravel	2.1
SB-4	SS- 11	30-32	Moist, very pale brown sand	2.3
SB-4	SS- 12	35-37	Moist, very pale sand	2.5
SB-5	SS- 2	2-4	Moist, yellowish brown sand with gravel	2.2
SB-5	SS- 3	4-6	Moist, light brown sand with gravel	2.2
SB-5	SS- 8	14-16	Moist, light brown sand	2.7

Notes: Temperature of Drying : 110º Celsius

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	ajl
Sample ID:	---	Test Date:	03/24/25	Checked By:	ank
Depth :	---	Test Id:	807499		

Moisture Content of Soil and Rock - ASTM D2216

Boring ID	Sample ID	Depth	Description	Moisture Content,%
SB-5	SS- 10	25-27	Moist, light brown sand with silt	3.0
SB-5	SS- 13	40-42	Moist, yellowish brown sand with gravel	3.2
SB-6	SS- 4	6-8	Moist, yellowish brown sand with gravel	3.0
SB-6	SS- 7	12-14	Moist, very pale brown sand	2.9
SB-6	SS- 9	20-22	Moist, very pale brown sand	2.9
SB-6	SS- 15	50-52	Moist, brown sand with gravel	13.1
SB-7	SS- 2	2-4	Moist, brown silty sand	6.6
SB-7	SS- 3	4-6	Moist, red sand	5.7
SB-7	SS- 9	20-22	Moist, yellowish brown sand with gravel	3.0
SB-7	SS- 11	30-32	Moist, light yellowish brown sand	3.4

Notes: Temperature of Drying : 110º Celsius

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	ajl
Sample ID:	---	Test Date:	03/21/25	Checked By:	ank
Depth :	---	Test Id:	807536		

Moisture Content of Soil and Rock - ASTM D2216

Boring ID	Sample ID	Depth	Description	Moisture Content,%
SB-7	SS- 12	35-37	Moist, light yellowish brown sand with gravel	5.0
SB-8	SS- 3	4-6	Moist, light yellowish brown sand	2.4
SB-8	SS- 4	6-8	Moist, light yellowish brown sand with silt and gravel	2.1
SB-8	SS- 8	14-16	Moist, reddish yellow sand	2.5
SB-8	SS- 10	25-27	Moist, pale brown sand with gravel	3.4
SB-8	SS- 13	40-42	Moist, very pale brown sand	1.5
SB-8	SS- 15	50-52	Moist, very pale brown sand with gravel	2.3
SB-9	SS- 3	4-6	Moist, pale brown sand with gravel	3.8
SB-9	SS- 4	6-8	Moist, light brown sand with gravel	3.1
SB-9	SS- 8	14-16	Moist, pale brown sand	3.8

Notes: Temperature of Drying : 110º Celsius

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-9	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-14	Test Date:	03/24/25	Checked By:	ank
Depth :	45-47	Test Id:	807537		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Moisture Content of Soil and Rock - ASTM D2216

Boring ID	Sample ID	Depth	Description	Moisture Content,%
SB-9	SS- 14	45-47	Moist, pale brown sand with gravel	2.5

Notes: Temperature of Drying : 110º Celsius

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	cam
Sample ID:	---	Test Date:	03/21/25	Checked By:	ank
Depth :	---	Test Id:	807539		

Moisture, Ash, and Organic Matter - ASTM D2974

Boring ID	Sample ID	Depth	Description	Moisture Content,%	Ash Content,%	Organic Matter,%
SB-1	SS-1	0-2	Moist, dark grayish brown silty sand	9	98.7	1.3
SB-2	SS-3	4-6	Moist, pale brown silty sand	12	99.2	.8
SB-2	SS-11	30-32	Moist, very pale sand	4	100.0	.0
SB-3	SS-2	2-4	Moist, brown silty sand	10	99.2	.8
SB-4	SS-11	30-32	Moist, very pale brown sand	2	99.9	.1
SB-6	SS-7	12-14	Moist, very pale brown sand	3	99.9	.1
SB-7	SS-3	4-6	Moist, red sand	5	99.5	.5
SB-8	SS-4	6-8	Moist, light yellowish brown sand with silt and gravel	2	99.8	.2

Notes: Moisture content determined by Method A and reported as a percentage of oven-dried mass; dried to a constant mass at temperature of 105º C
Ash content and organic matter determined by Method C; dried to constant mass at temperature 440º C

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	ajl
Sample ID:	---	Test Date:	04/01/25	Checked By:	ank
Depth :	---	Test Id:	807398		

USCS Classification - ASTM D2487

Boring ID	Sample ID	Depth	Group Name	Group Symbol	Gravel, %	Sand, %	Fines, %
SB-1	SS-1	0-2	Silty SAND	SM	1.0	60.9	38.1
SB-1	SS-3	4-6	Poorly graded SAND with Silt and Gravel	SP-SM	39.3	52.9	7.8
SB-1	SS-12	35-37	Poorly graded SAND with Gravel	SP	15.5	81.5	3.0
SB-1	SS-14	45-47	Poorly graded SAND with Gravel	SP	26.2	69.8	4.0
SB-2	SS-2	2-4	Silty SAND	SM	5.9	71.2	22.9
SB-2	SS-3	4-6	Silty SAND	SM	0.0	59.5	40.5
SB-2	SS-8	14-16	Poorly graded SAND	SP	3.0	93.4	3.6
SB-2	SS-11	30-32	Poorly graded SAND	SP	2.7	93.5	3.8
SB-3	SS-2	2-4	Silty SAND	SM	4.3	69.2	26.5
SB-3	SS-3	4-6	Poorly graded SAND with Silt and Gravel	SP-SM	19.1	74.9	6.0

Remarks: Grain Size analysis performed by ASTM D 6913 results enclosed

Atterberg Limits performed by ASTM D4318, results enclosed

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	ajl
Sample ID:	---	Test Date:	04/01/25	Checked By:	ank
Depth :	---	Test Id:	807443		

USCS Classification - ASTM D2487

Boring ID	Sample ID	Depth	Group Name	Group Symbol	Gravel, %	Sand, %	Fines, %
SB-3	SS-9	20-22	Poorly graded SAND with Gravel	SP	18.5	78.3	3.2
SB-3	SS-14	45-47	Poorly graded SAND with Silt	SP-SM	1.1	93.8	5.1
SB-4	SS-3	4-6	Poorly graded SAND with Gravel	SP	27.7	69.0	3.3
SB-4	SS-9	20-22	Poorly graded SAND with Silt and Gravel	SP-SM	34.1	60.7	5.2
SB-4	SS-11	30-32	Poorly graded SAND	SP	11.4	86.4	2.2
SB-4	SS-12	35-37	Poorly graded SAND	SP	6.2	90.5	3.3
SB-5	SS-2	2-4	Poorly graded SAND with Gravel	SP	24.8	72.4	2.8
SB-5	SS-8	14-16	Poorly graded SAND	SP	2.2	95.9	1.9
SB-5	SS-10	25-27	Poorly graded SAND with Silt	SP-SM	9.3	85.3	5.4
SB-5	SS-13	40-42	Poorly graded SAND with Gravel	SP	16.5	79.3	4.2

Remarks: Grain Size analysis performed by ASTM D 6913 results enclosed

Atterberg Limits performed by ASTM D4318, results enclosed

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	ajl
Sample ID:	---	Test Date:	04/01/25	Checked By:	ank
Depth :	---	Test Id:	807515		

USCS Classification - ASTM D2487

Boring ID	Sample ID	Depth	Group Name	Group Symbol	Gravel, %	Sand, %	Fines, %
SB-6	SS-4	6-8	Poorly graded SAND with Gravel	SP	33.1	63.5	3.4
SB-6	SS-7	12-14	Poorly graded SAND	SP	11.4	85.5	3.1
SB-6	SS-9	20-22	Poorly graded SAND	SP	1.6	97.0	1.4
SB-6	SS-15	50-52	Poorly graded SAND with Gravel	SP	19.8	77.7	2.5
SB-7	SS-3	4-6	Poorly graded SAND	SP	7.0	88.3	4.7
SB-7	SS-9	20-22	Poorly graded SAND with Gravel	SP	34.4	61.3	4.3
SB-7	SS-11	30-32	Poorly graded SAND	SP	7.8	88.4	3.8
SB-7	SS-12	35-37	Poorly graded SAND with Gravel	SP	17.6	79.6	2.8
SB-8	SS-3	4-6	Poorly graded SAND	SP	6.0	89.7	4.3
SB-8	SS-4	6-8	Poorly graded SAND with Silt and Gravel	SP-SM	23.9	70.5	5.6

Remarks: Grain Size analysis performed by ASTM D 6913 results enclosed

Atterberg Limits performed by ASTM D4318, results enclosed

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	ajl
Sample ID:	---	Test Date:	04/01/25	Checked By:	ank
Depth :	---	Test Id:	807521		

USCS Classification - ASTM D2487

Boring ID	Sample ID	Depth	Group Name	Group Symbol	Gravel, %	Sand, %	Fines, %
SB-8	SS-10	25-27	Poorly graded SAND with Gravel	SP	21.1	75.2	3.7
SB-8	SS-13	40-42	Poorly graded SAND	SP	11.3	86.3	2.4
SB-9	SS-3	4-6	Poorly graded SAND with Gravel	SP	15.0	82.9	2.1
SB-9	SS-4	6-8	Poorly graded SAND with Gravel	SP	25.2	70.3	4.5
SB-9	SS-8	14-16	Poorly graded SAND	SP	1.0	96.2	2.8
SB-9	SS-14	45-47	Poorly graded SAND with Gravel	SP	18.1	78.4	3.5

Remarks: Grain Size analysis performed by ASTM D 6913 results enclosed
Atterberg Limits performed by ASTM D4318, results enclosed

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	---	Sample Type:	---	Tested By:	ajl
Sample ID:	---	Test Date:	03/19/25	Checked By:	ank
Depth :	---	Test Id:	807542		

Specific Gravity of Soils by ASTM D854

Boring ID	Sample ID	Depth	Visual Description	Specific Gravity	Comment
SB-1	SS- 3	4-6	Moist, light yellowish brown sand with silt and gravel	2.67	
SB-2	SS- 14	45-47	Moist, light yellowish brown sand	2.66	
SB-4	SS- 11	30-32	Moist, very pale brown sand	2.73	
SB-4	SS- 12	35-37	Moist, very pale sand	2.72	
SB-6	SS- 9	20-22	Moist, very pale brown sand	2.65	
SB-8	SS- 8	14-16	Moist, reddish yellow sand	2.68	
SB-8	SS- 13	40-42	Moist, very pale brown sand	2.70	
SB-9	SS- 3	4-6	Moist, pale brown sand with gravel	2.66	

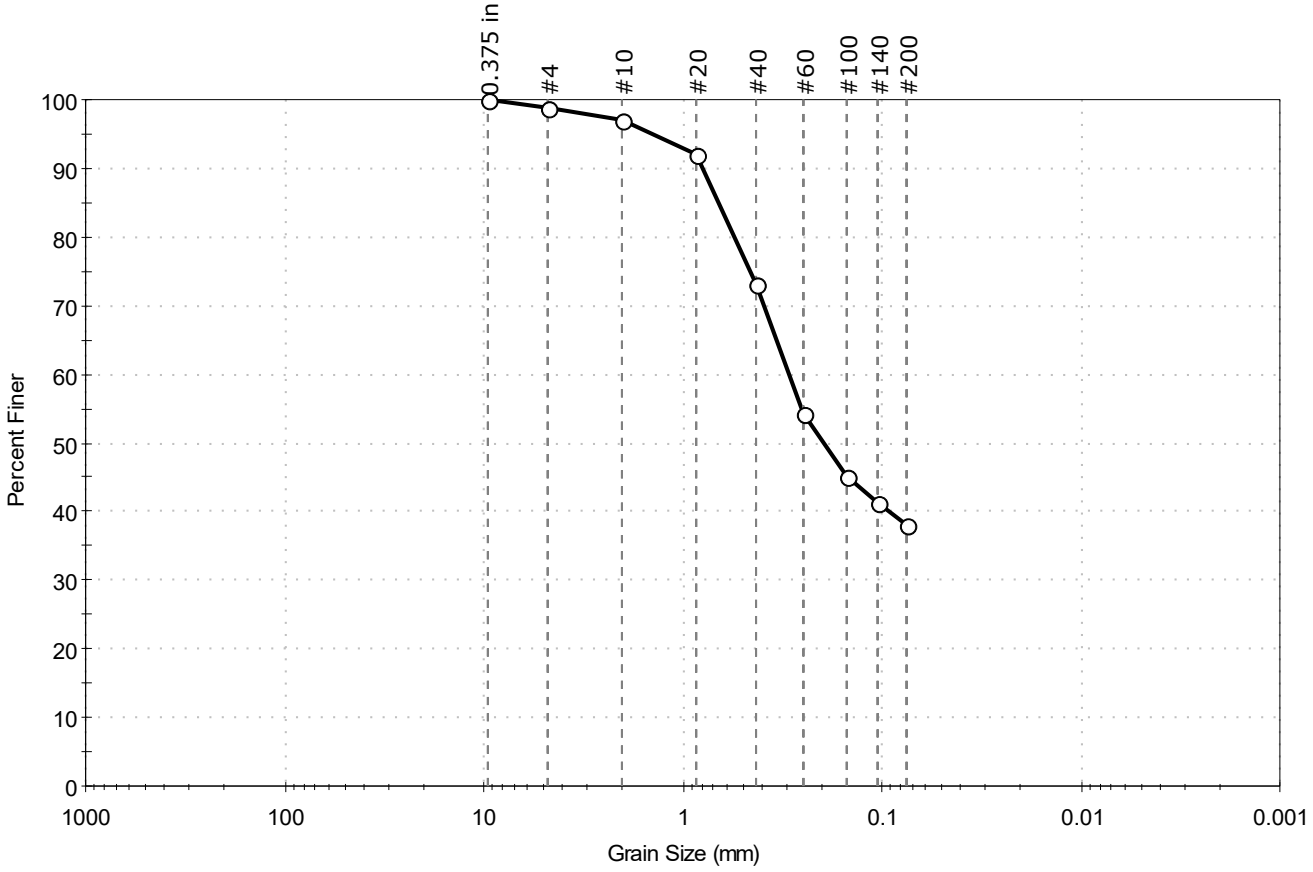
Notes: Specific Gravity performed by using method B (oven dried specimens) of ASTM D854

Moisture Content determined by ASTM D2216.

* Only minus No.4 Sieve material tested. Insufficient quantity of material greater than the No.4 Sieve available to perform ASTM C127 Specific Gravity of Aggregate.
92.8 %Passing the No.4 Sieve.

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-1	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-1	Test Date:	03/24/25	Checked By:	ank
Depth :	0-2	Test Id:	807347		
Test Comment:	---				
Visual Description:	Moist, dark grayish brown silty sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	1.0	60.9	38.1

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	99		
#10	2.00	97		
#20	0.85	92		
#40	0.42	73		
#60	0.25	54		
#100	0.15	45		
#140	0.11	41		
#200	0.075	38		

Coefficients

D_{85} = 0.6563 mm D_{30} = N/A

D_{60} = 0.2940 mm D_{15} = N/A

D_{50} = 0.1979 mm D_{10} = N/A

C_u = N/A C_c = N/A

Classification

ASTM Silty SAND (SM)

AASHTO Silty Soils (A-4 (0))

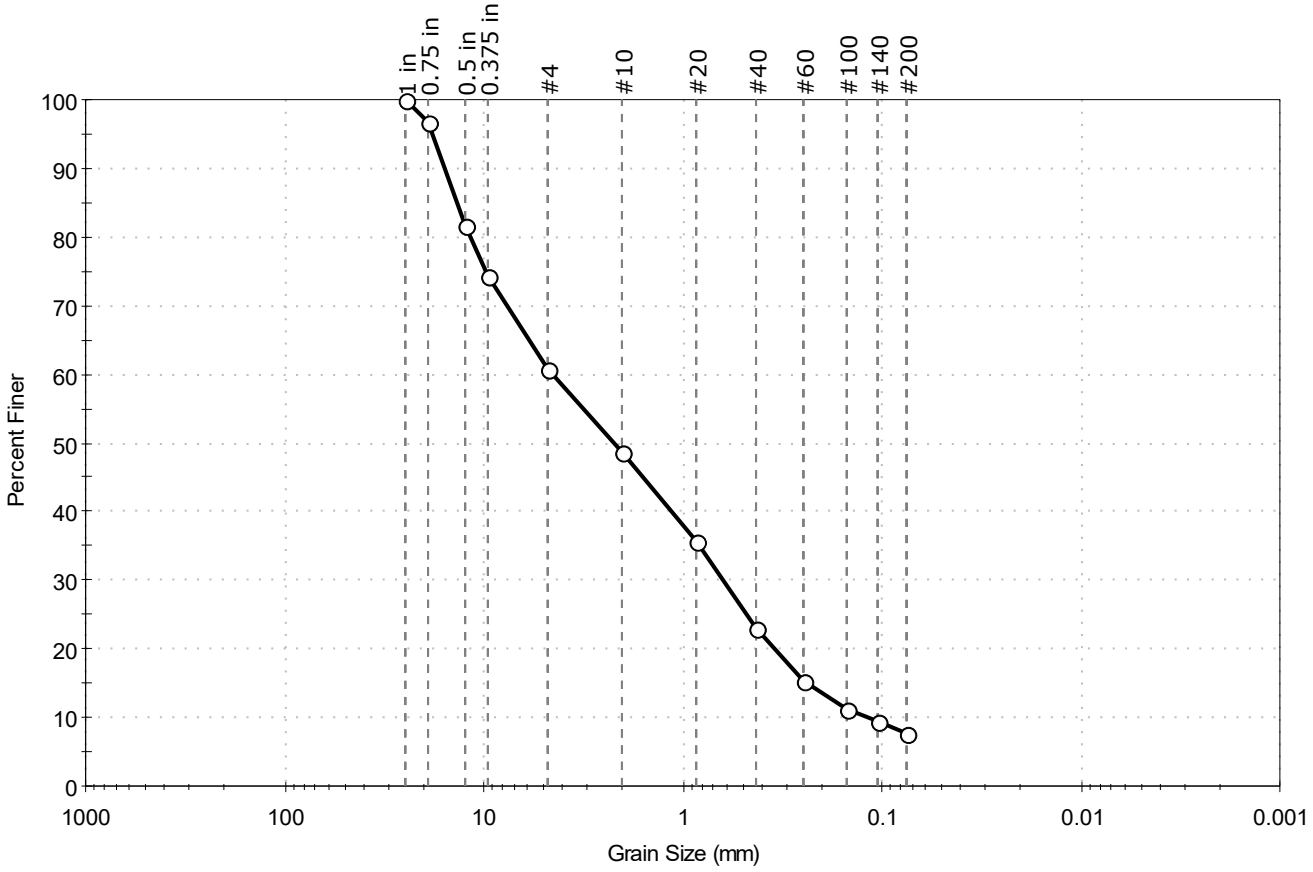
Sample/Test Description

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-1	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-3	Test Date:	03/26/25	Checked By:	ank
Depth :	4-6	Test Id:	807348		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand with silt and gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	39.3	52.9	7.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	97		
0.5 in	12.50	82		
0.375 in	9.50	74		
#4	4.75	61		
#10	2.00	49		
#20	0.85	36		
#40	0.42	23		
#60	0.25	15		
#100	0.15	11		
#140	0.11	9		
#200	0.075	7.8		

Coefficients

D_{85} = 13.6822 mm	D_{30} = 0.6219 mm
D_{60} = 4.5274 mm	D_{15} = 0.2385 mm
D_{50} = 2.2129 mm	D_{10} = 0.1188 mm
C_u = 38.109	C_c = 0.719

Classification

ASTM — Poorly graded SAND with Silt and Gravel (SP-SM)

AASHTO — Stone Fragments, Gravel and Sand (A-1-a (1))

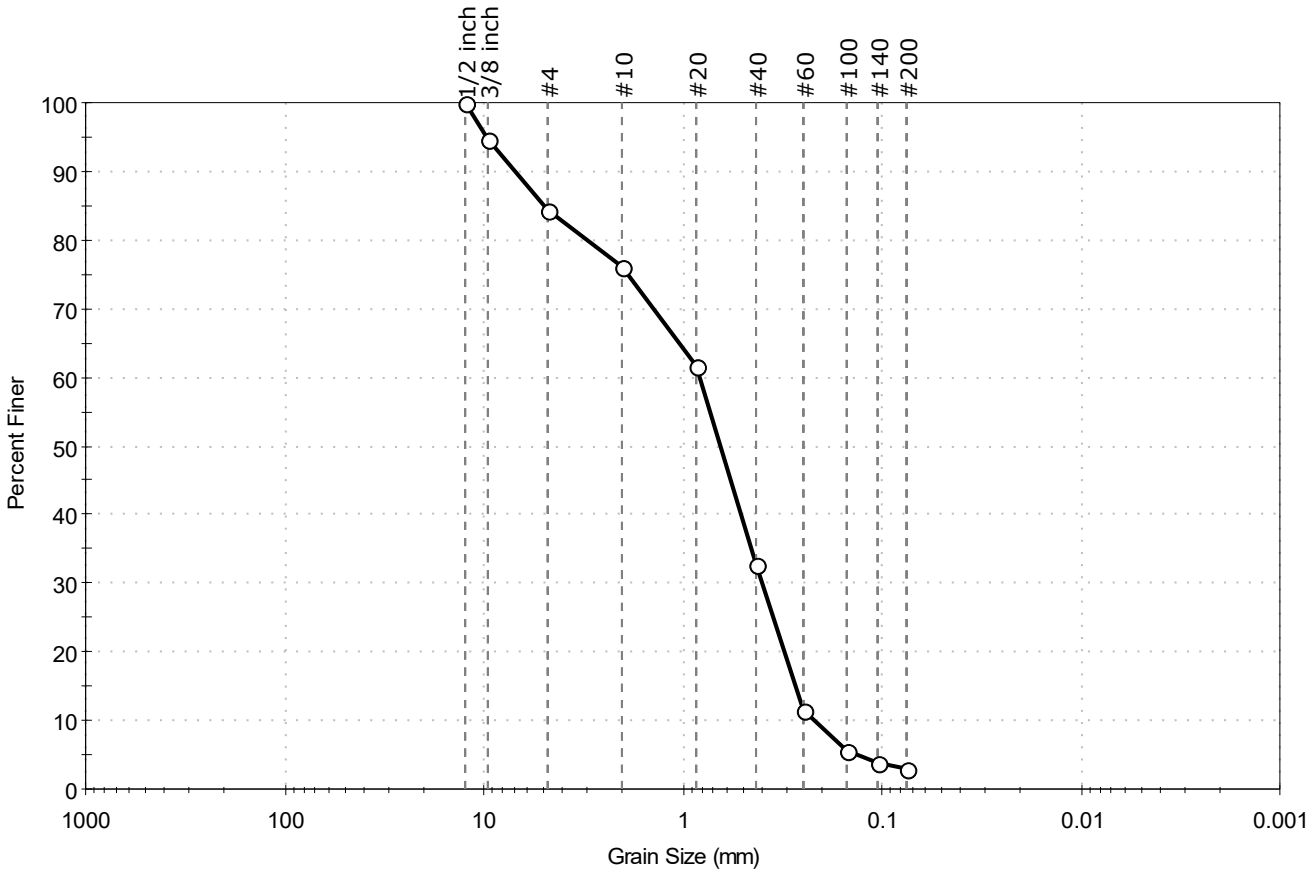
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-1	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-12	Test Date:	03/24/25	Checked By:	ank
Depth :	35-37	Test Id:	807349		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	15.5	81.5	3.0

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1/2 inch	12.50	100		
3/8 inch	9.50	95		
#4	4.75	84		
#10	2.00	76		
#20	0.85	62		
#40	0.42	33		
#60	0.25	12		
#100	0.15	5		
#140	0.11	4		
#200	0.075	3.0		

Coefficients

D_{85} =4.9246 mm	D_{30} =0.3966 mm
D_{60} =0.8154 mm	D_{15} =0.2723 mm
D_{50} =0.6419 mm	D_{10} =0.2189 mm
C_u =3.725	C_c =0.881

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

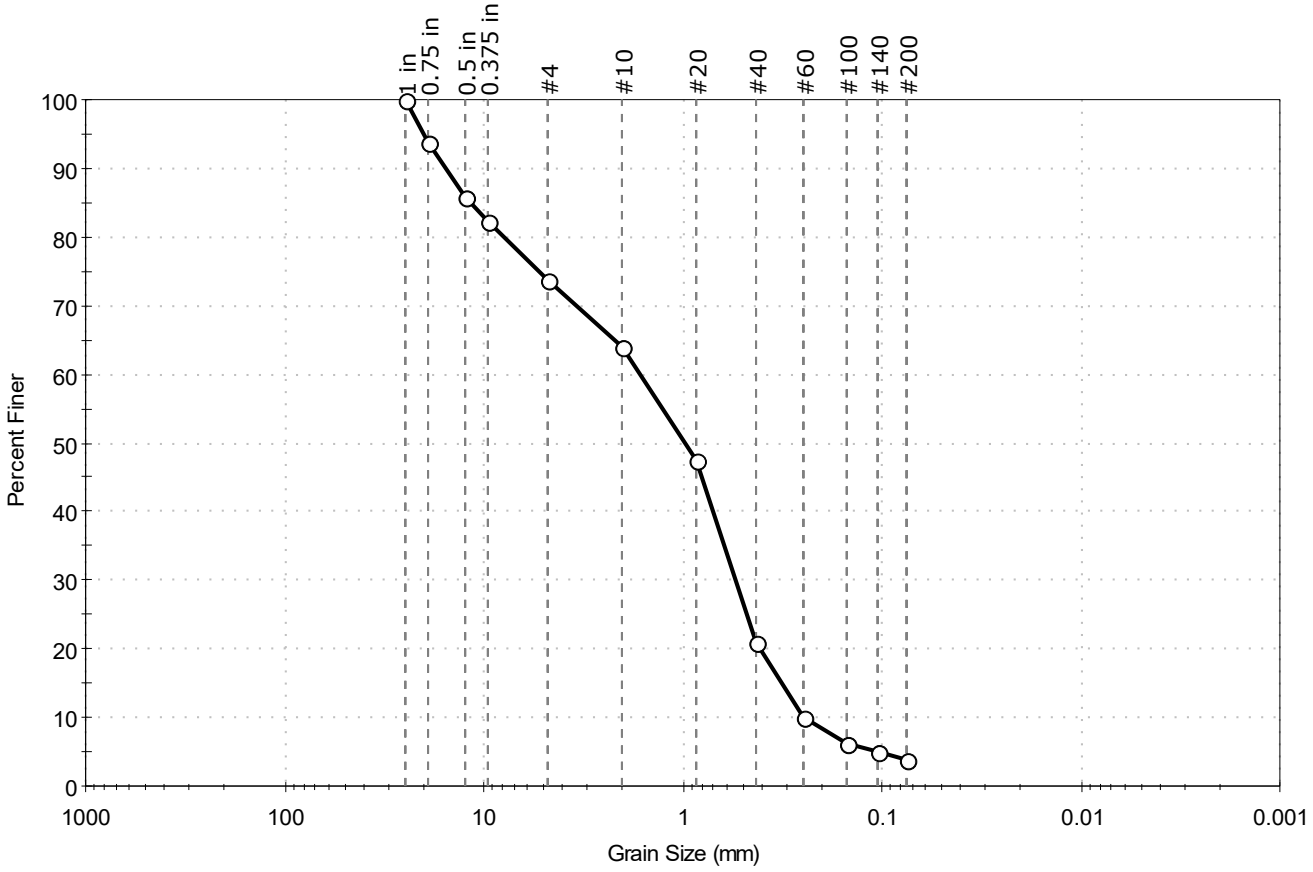
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-1	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-14	Test Date:	03/26/25	Checked By:	ank
Depth :	45-47	Test Id:	807350		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	26.2	69.8	4.0

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	94		
0.5 in	12.50	86		
0.375 in	9.50	82		
#4	4.75	74		
#10	2.00	64		
#20	0.85	48		
#40	0.42	21		
#60	0.25	10		
#100	0.15	6		
#140	0.11	5		
#200	0.075	4.0		

Coefficients

D_{85} = 11.7481 mm
D_{30} = 0.5371 mm
D_{60} = 1.6309 mm
D_{15} = 0.3170 mm
D_{50} = 0.9635 mm
D_{10} = 0.2459 mm
C_u = 6.632
C_c = 0.719

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

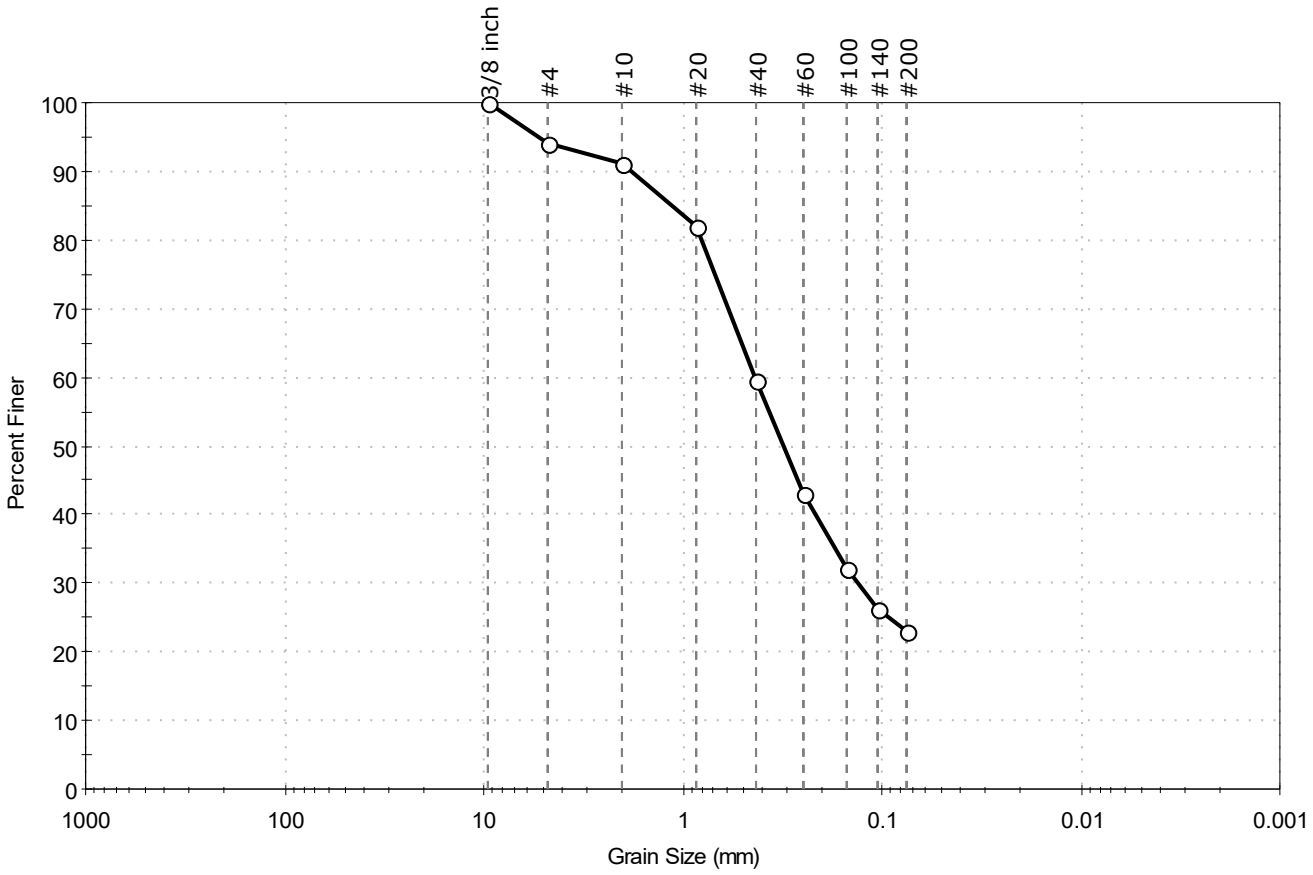
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-2	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-2	Test Date:	03/24/25	Checked By:	ank
Depth :	2-4	Test Id:	807351		
Test Comment:	---				
Visual Description:	Moist, dark brown silty sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	5.9	71.2	22.9

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
3/8 inch	9.50	100		
#4	4.75	94		
#10	2.00	91		
#20	0.85	82		
#40	0.42	59		
#60	0.25	43		
#100	0.15	32		
#140	0.11	26		
#200	0.075	23		

Coefficients

D_{85} = 1.1202 mm D_{30} = 0.1320 mm

D_{60} = 0.4317 mm D_{15} = N/A

D_{50} = 0.3133 mm D_{10} = N/A

C_u = N/A C_c = N/A

Classification

ASTM Silty SAND (SM)

AASHTO Silty Gravel and Sand (A-2-4 (0))

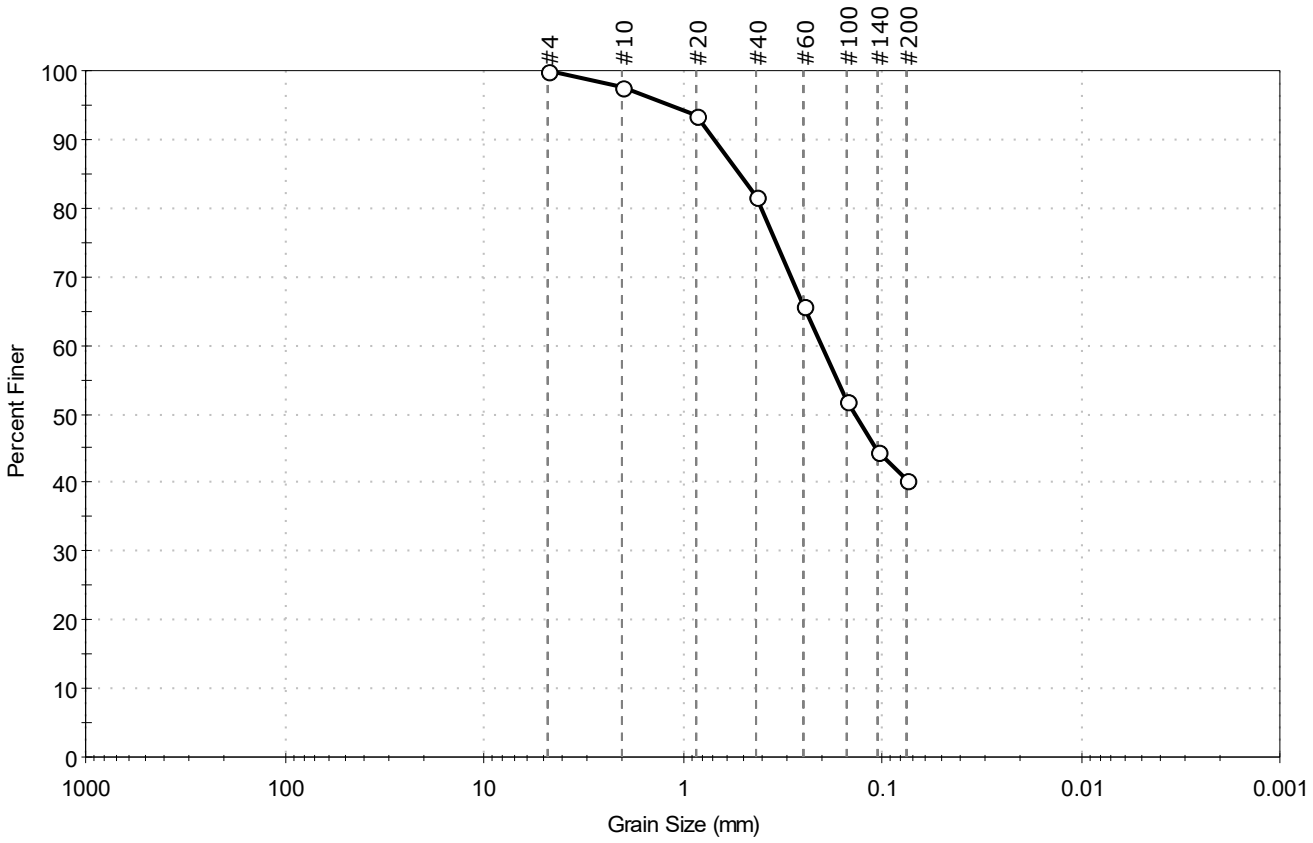
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-2	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-3	Test Date:	03/24/25	Checked By:	ank
Depth :	4-6	Test Id:	807352		
Test Comment:	---				
Visual Description:	Moist, pale brown silty sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	59.5	40.5

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	98		
#20	0.85	93		
#40	0.42	82		
#60	0.25	66		
#100	0.15	52		
#140	0.11	44		
#200	0.075	41		

Coefficients

D_{85} = 0.5158 mm D_{30} = N/A

D_{60} = 0.2020 mm D_{15} = N/A

D_{50} = 0.1378 mm D_{10} = N/A

C_u = N/A C_c = N/A

Classification

ASTM Silty SAND (SM)

AASHTO Silty Soils (A-4 (0))

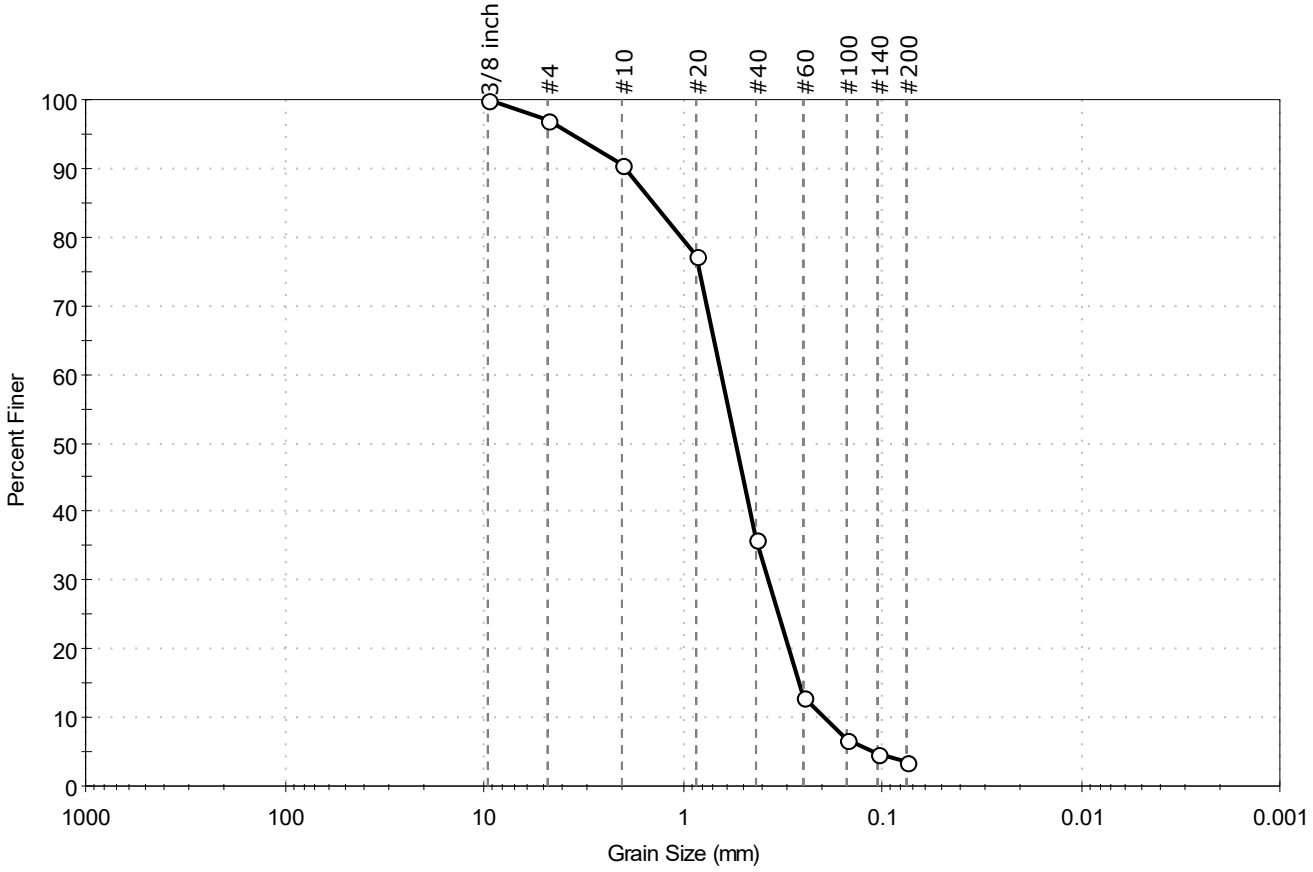
Sample/Test Description

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-2	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-8	Test Date:	03/24/25	Checked By:	ank
Depth :	14-16	Test Id:	807353		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	3.0	93.4	3.6

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
3/8 inch	9.50	100		
#4	4.75	97		
#10	2.00	91		
#20	0.85	77		
#40	0.42	36		
#60	0.25	13		
#100	0.15	7		
#140	0.11	5		
#200	0.075	3.6		

Coefficients

D_{85} = 1.3997 mm	D_{30} = 0.3697 mm
D_{60} = 0.6365 mm	D_{15} = 0.2619 mm
D_{50} = 0.5376 mm	D_{10} = 0.1954 mm
C_u = 3.257	C_c = 1.099

Classification

ASTM — Poorly graded SAND (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
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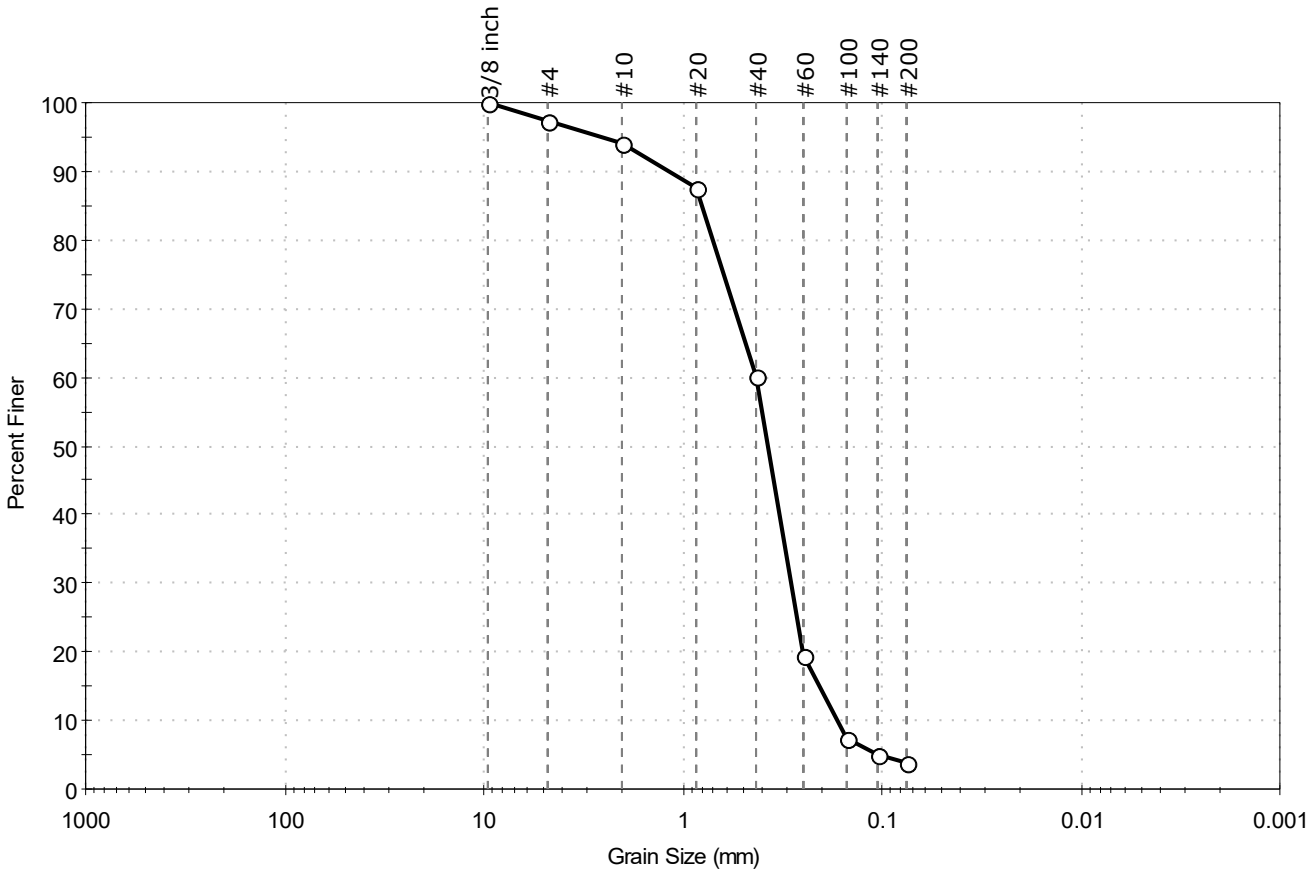
Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-2	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-11	Test Date:	03/24/25	Checked By:	ank
Depth :	30-32	Test Id:	807403		
Test Comment:	---				
Visual Description:	Moist, very pale sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	2.7	93.5	3.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
3/8 inch	9.50	100		
#4	4.75	97		
#10	2.00	94		
#20	0.85	88		
#40	0.42	60		
#60	0.25	20		
#100	0.15	7		
#140	0.11	5		
#200	0.075	3.8		

Coefficients

D_{85} = 0.7962 mm	D_{30} = 0.2867 mm
D_{60} = 0.4240 mm	D_{15} = 0.2073 mm
D_{50} = 0.3721 mm	D_{10} = 0.1683 mm
C_u = 2.519	C_c = 1.152

Classification

ASTM Poorly graded SAND (SP)

AASHTO Fine Sand (A-3 (1))

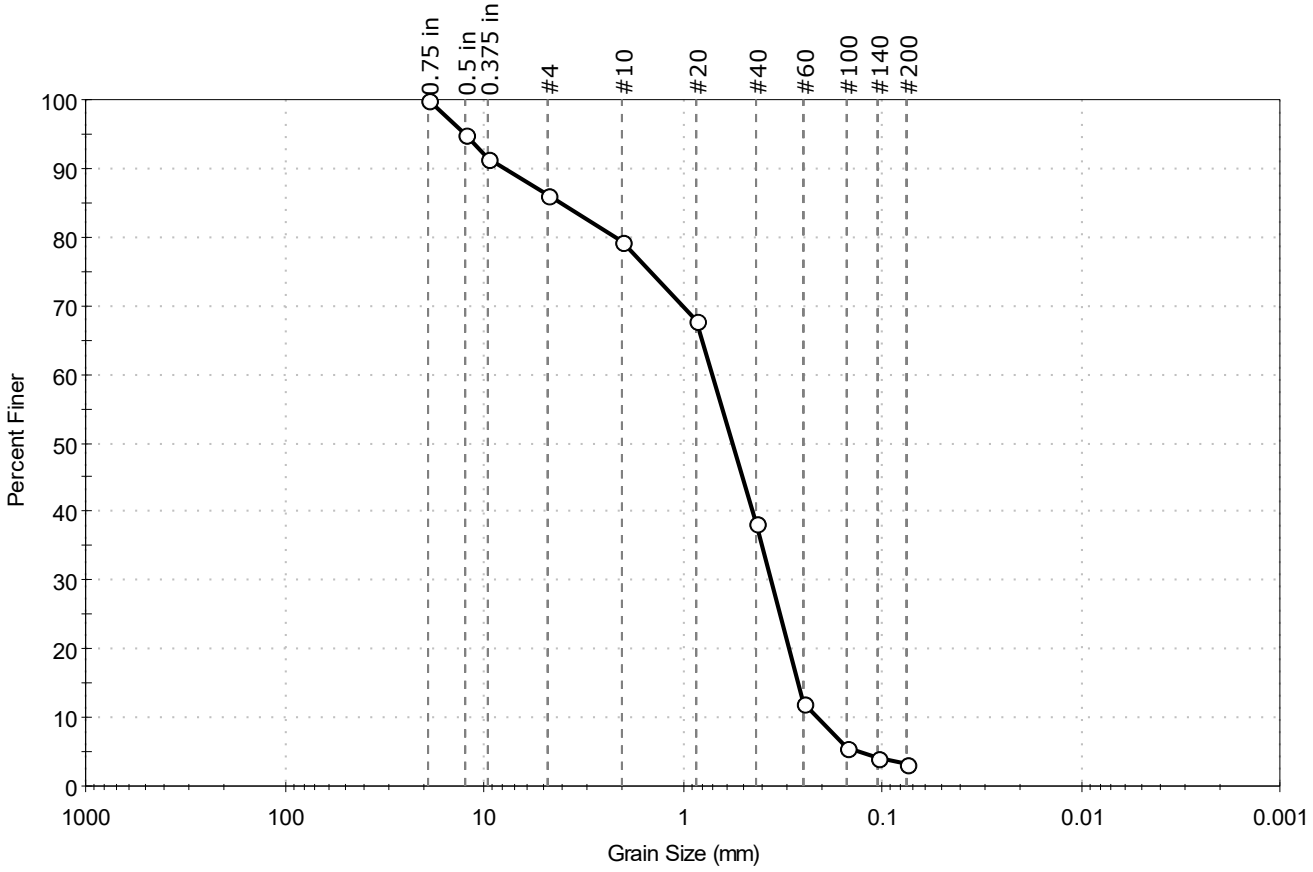
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-2	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-14	Test Date:	03/24/25	Checked By:	ank
Depth :	45-47	Test Id:	807410		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	14.0	82.8	3.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.75 in	19.00	100		
0.5 in	12.50	95		
0.375 in	9.50	91		
#4	4.75	86		
#10	2.00	79		
#20	0.85	68		
#40	0.42	38		
#60	0.25	12		
#100	0.15	6		
#140	0.11	4		
#200	0.075	3.2		

Coefficients

D_{85} =4.1638 mm	D_{30} =0.3597 mm
D_{60} =0.7072 mm	D_{15} =0.2654 mm
D_{50} =0.5597 mm	D_{10} =0.2123 mm
C_u =3.331	C_c =0.862

Classification

ASTM — Poorly graded SAND (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

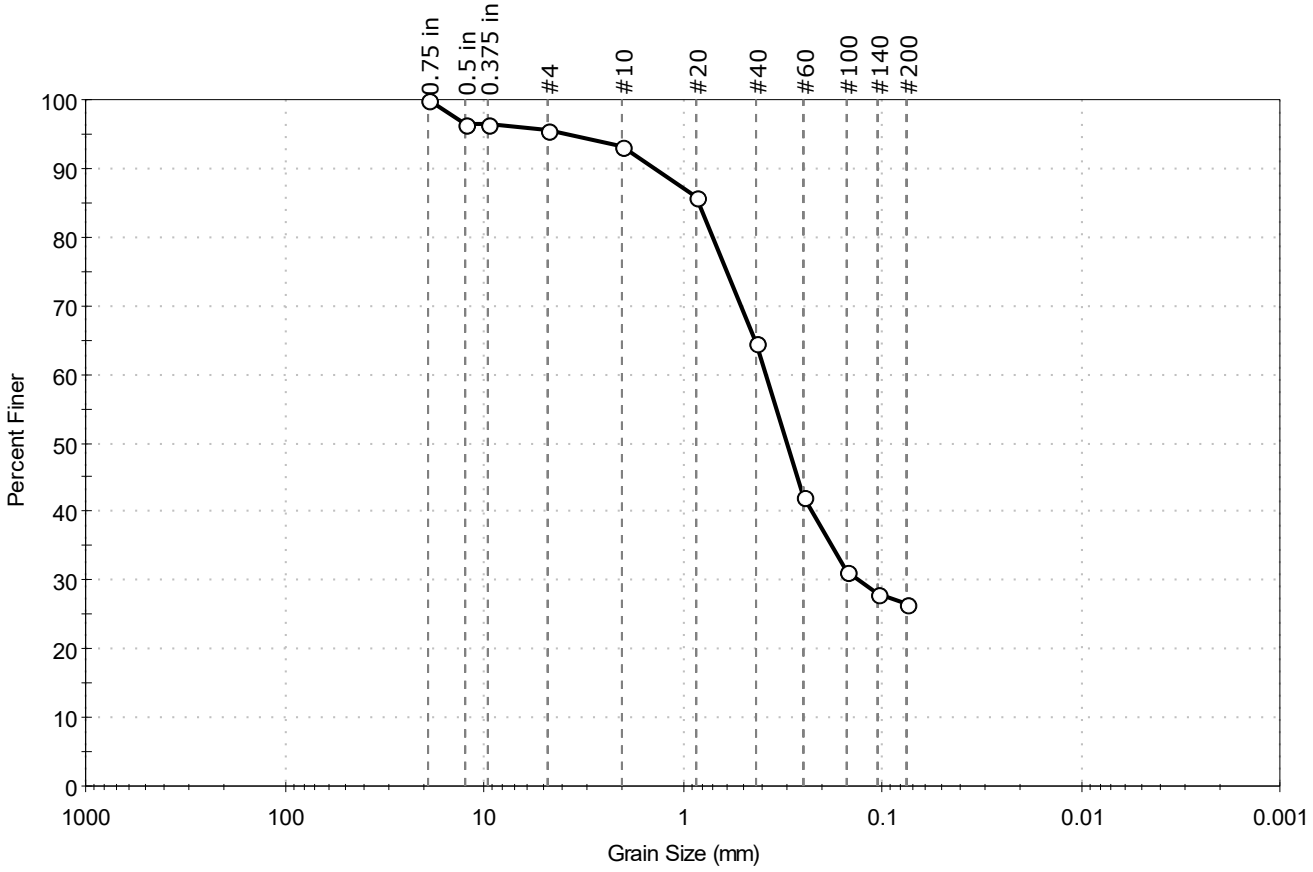
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-3	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-2	Test Date:	03/24/25	Checked By:	ank
Depth :	2-4	Test Id:	807404		
Test Comment:	---				
Visual Description:	Moist, brown silty sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	4.3	69.2	26.5

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.75 in	19.00	100		
0.5 in	12.50	96		
0.375 in	9.50	96		
#4	4.75	96		
#10	2.00	93		
#20	0.85	86		
#40	0.42	64		
#60	0.25	42		
#100	0.15	31		
#140	0.11	28		
#200	0.075	26		

Coefficients

D_{85} = 0.8259 mm
D_{30} = 0.1310 mm
D_{60} = 0.3820 mm
D_{15} = N/A
D_{50} = 0.3011 mm
D_{10} = N/A
C_u = N/A
C_c = N/A

Classification

ASTM Silty SAND (SM)

AASHTO Silty Gravel and Sand (A-2-4 (0))

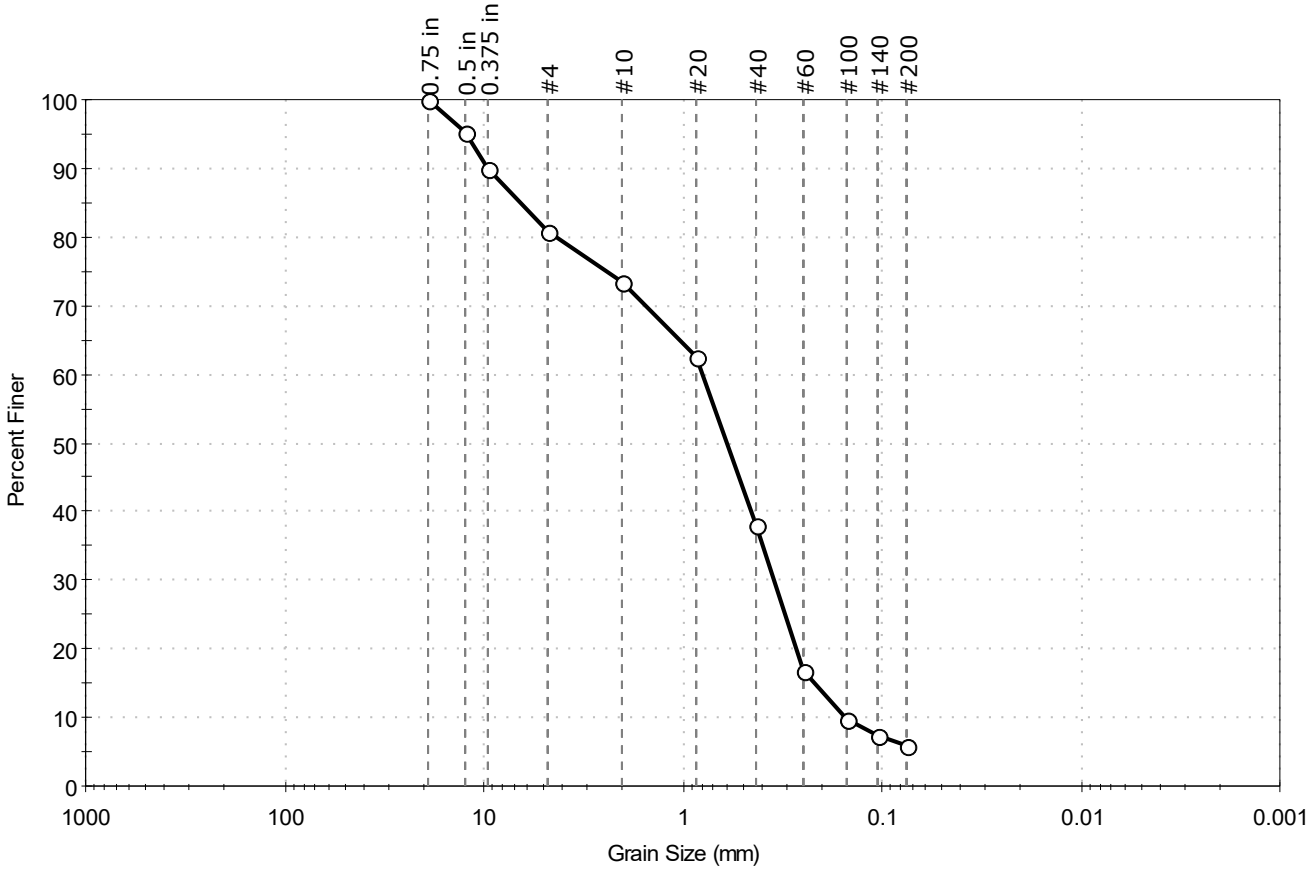
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-3	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-3	Test Date:	03/26/25	Checked By:	ank
Depth :	4-6	Test Id:	807405		
Test Comment:	---				
Visual Description:	Moist, yellowsih brown sand with silt and gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	19.1	74.9	6.0

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.75 in	19.00	100		
0.5 in	12.50	95		
0.375 in	9.50	90		
#4	4.75	81		
#10	2.00	73		
#20	0.85	63		
#40	0.42	38		
#60	0.25	17		
#100	0.15	10		
#140	0.11	7		
#200	0.075	6.0		

Coefficients

D_{85} =6.5268 mm	D_{30} =0.3483 mm
D_{60} =0.7906 mm	D_{15} =0.2209 mm
D_{50} =0.5964 mm	D_{10} =0.1539 mm
C_u =5.137	C_c =0.997

Classification

ASTM — Poorly graded SAND with Silt and Gravel (SP-SM)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

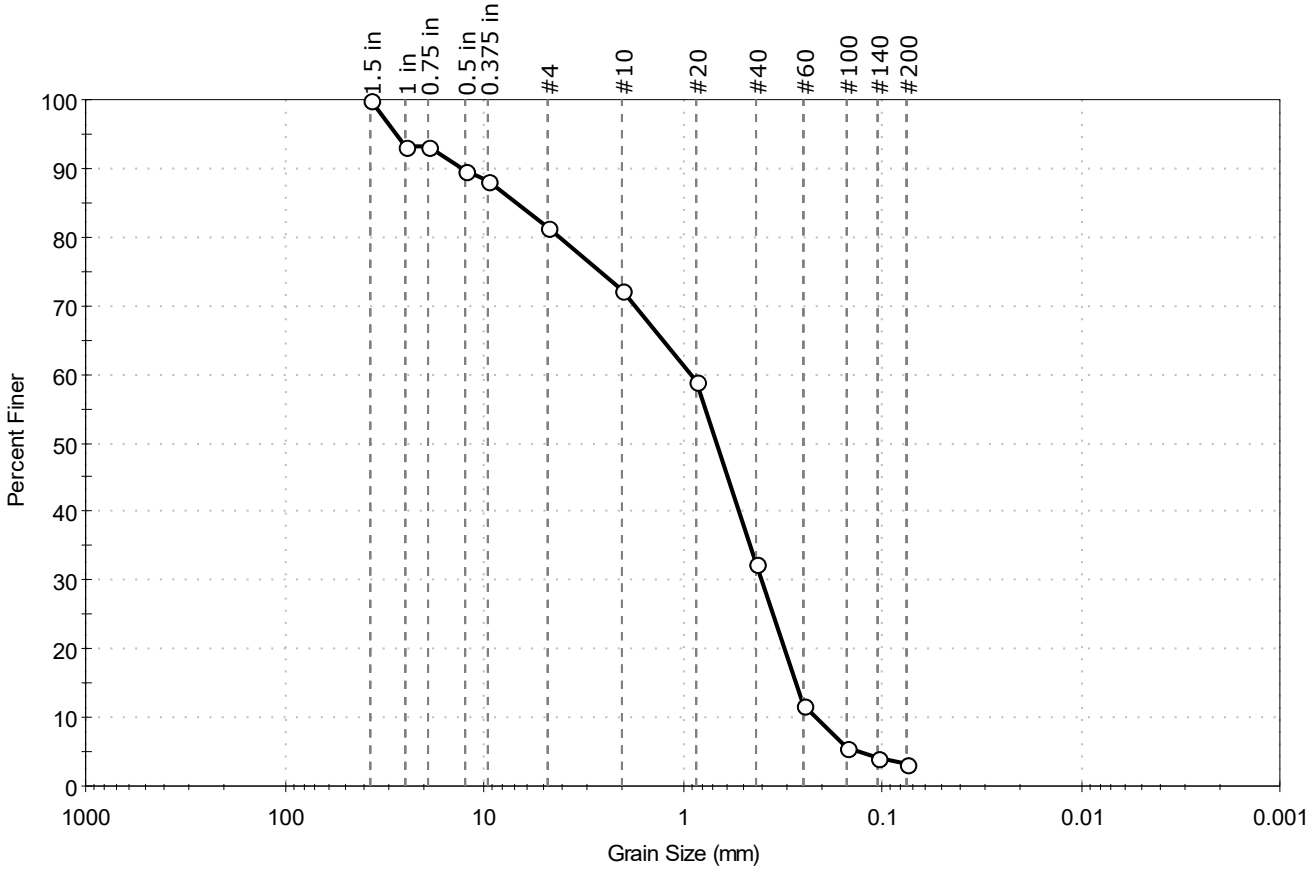
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-3	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-9	Test Date:	03/26/25	Checked By:	ank
Depth :	20-22	Test Id:	807406		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	18.5	78.3	3.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1.5 in	37.50	100		
1 in	25.00	93		
0.75 in	19.00	93		
0.5 in	12.50	90		
0.375 in	9.50	88		
#4	4.75	81		
#10	2.00	72		
#20	0.85	59		
#40	0.42	33		
#60	0.25	12		
#100	0.15	5		
#140	0.11	4		
#200	0.075	3.2		

Coefficients

D_{85} = 6.8439 mm
D_{30} = 0.3982 mm
D_{60} = 0.9025 mm
D_{15} = 0.2708 mm
D_{50} = 0.6706 mm
D_{10} = 0.2149 mm
C_u = 4.200
C_c = 0.818

Classification

ASTM: Poorly graded SAND with Gravel (SP)

AASHTO: Stone Fragments, Gravel and Sand (A-1-b (1))

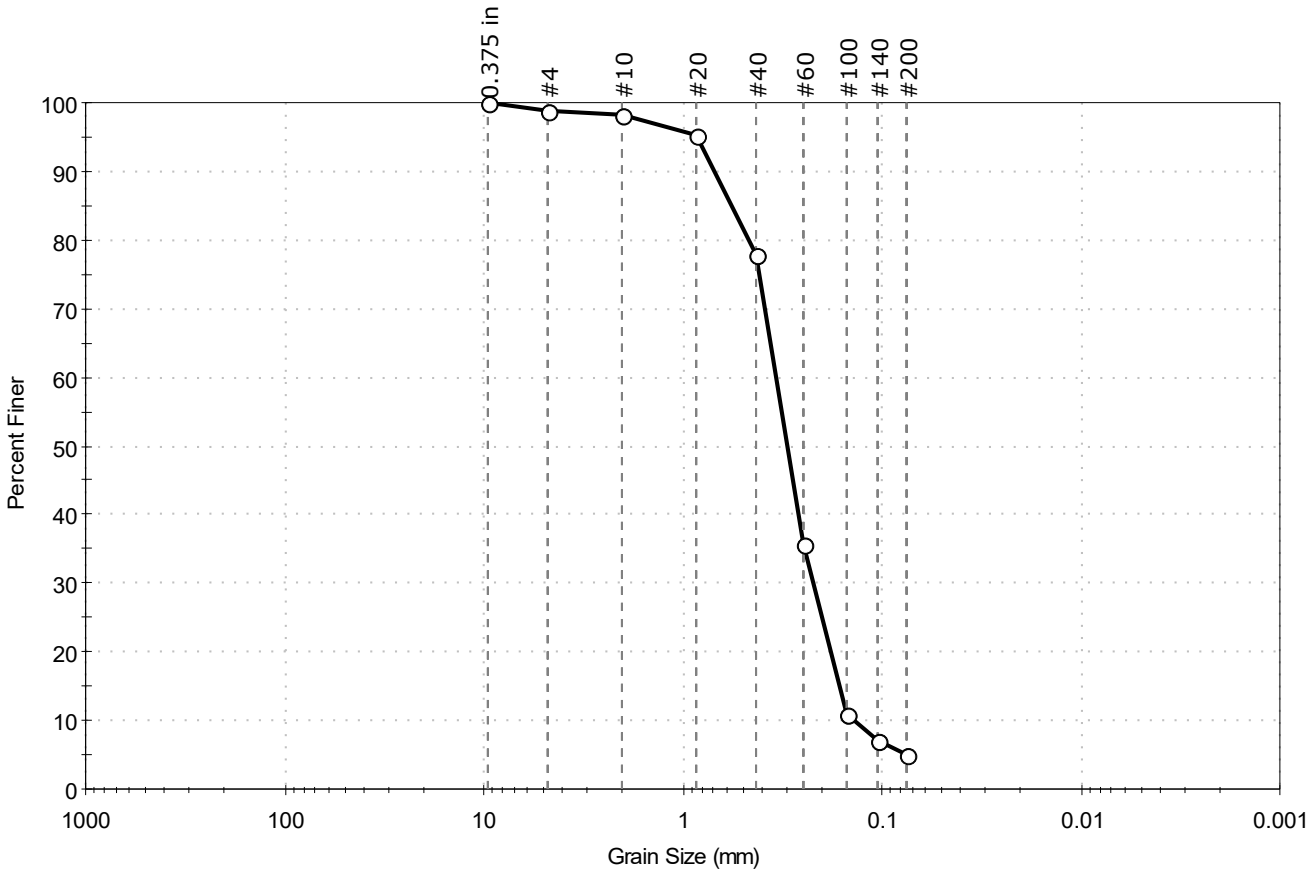
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-3	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-14	Test Date:	03/24/25	Checked By:	ank
Depth :	45-47	Test Id:	807407		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand with silt				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	1.1	93.8	5.1

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	99		
#10	2.00	98		
#20	0.85	95		
#40	0.42	78		
#60	0.25	36		
#100	0.15	11		
#140	0.11	7		
#200	0.075	5.1		

Coefficients

D_{85} = 0.5641 mm	D_{30} = 0.2227 mm
D_{60} = 0.3395 mm	D_{15} = 0.1636 mm
D_{50} = 0.2995 mm	D_{10} = 0.1392 mm
C_u = 2.439	C_c = 1.049

Classification

ASTM Poorly graded SAND with Silt (SP-SM)

AASHTO Fine Sand (A-3 (1))

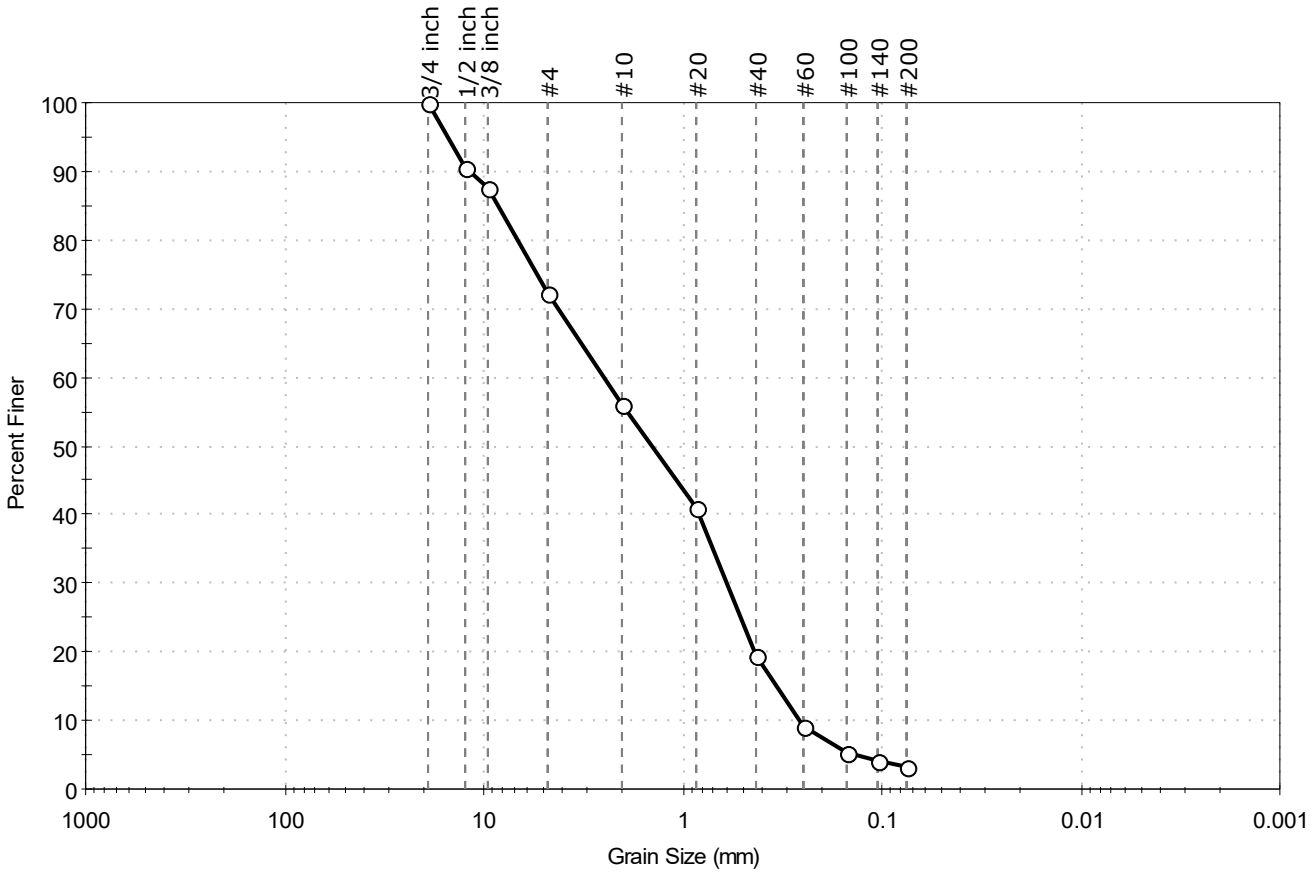
Sample/Test Description

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-4	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-3	Test Date:	03/24/25	Checked By:	ank
Depth :	4-6	Test Id:	807408		
Test Comment:	---				
Visual Description:	Moist, very dark brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	27.7	69.0	3.3

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
3/4 inch	19.00	100		
1/2 inch	12.50	91		
3/8 inch	9.50	88		
#4	4.75	72		
#10	2.00	56		
#20	0.85	41		
#40	0.42	20		
#60	0.25	9		
#100	0.15	5		
#140	0.11	4		
#200	0.075	3.3		

Coefficients

D_{85} = 8.3996 mm	D_{30} = 0.5968 mm
D_{60} = 2.4553 mm	D_{15} = 0.3385 mm
D_{50} = 1.4135 mm	D_{10} = 0.2629 mm
C_u = 9.339	C_c = 0.552

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

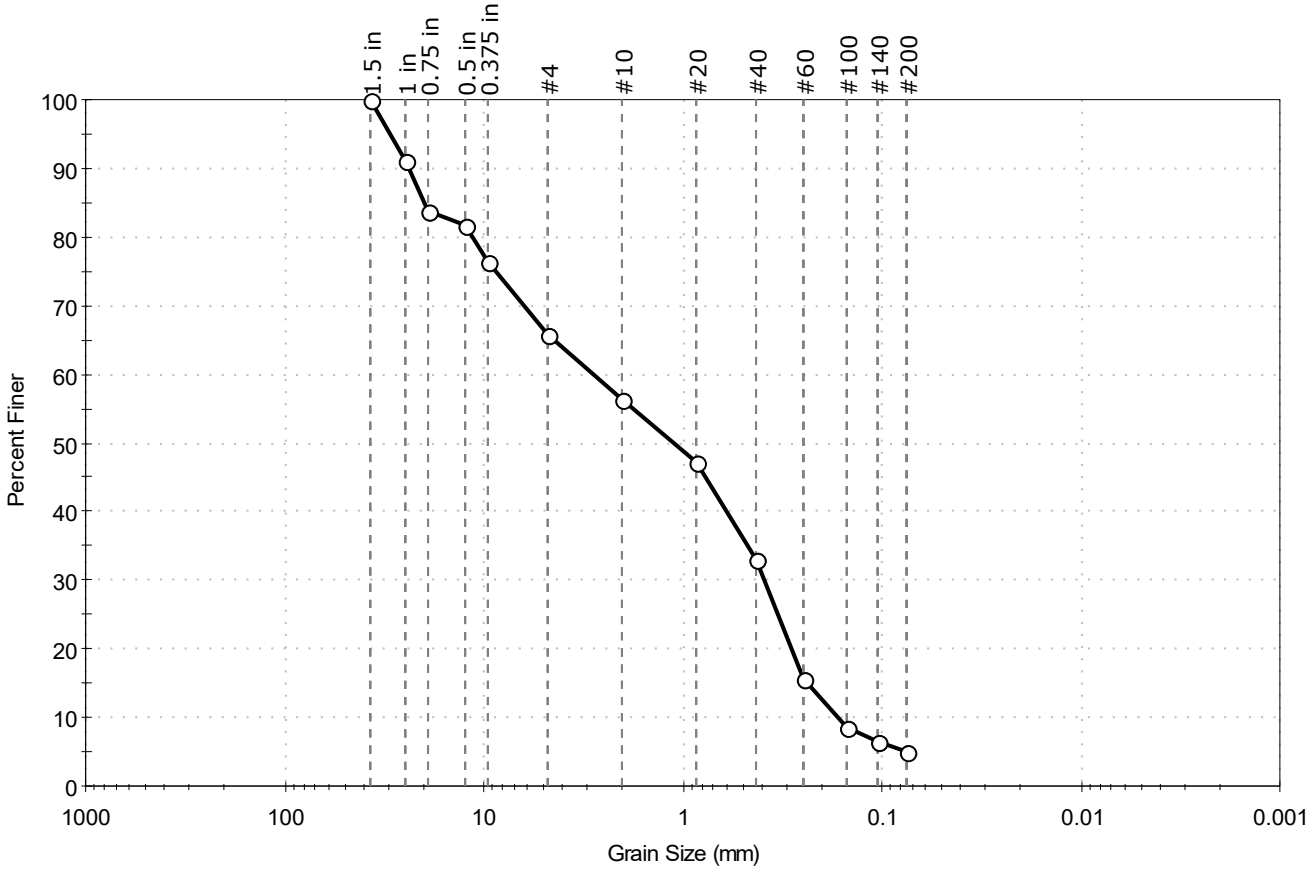
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-4	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-9	Test Date:	03/26/25	Checked By:	ank
Depth :	20-22	Test Id:	807409		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with silt and gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	34.1	60.7	5.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1.5 in	37.50	100		
1 in	25.00	91		
0.75 in	19.00	84		
0.5 in	12.50	82		
0.375 in	9.50	76		
#4	4.75	66		
#10	2.00	56		
#20	0.85	47		
#40	0.42	33		
#60	0.25	16		
#100	0.15	9		
#140	0.11	7		
#200	0.075	5.2		

Coefficients

D_{85} = 19.8974 mm	D_{30} = 0.3862 mm
D_{60} = 2.8069 mm	D_{15} = 0.2371 mm
D_{50} = 1.1046 mm	D_{10} = 0.1662 mm
C_u = 16.889	C_c = 0.320

Classification

ASTM: Poorly graded SAND with Silt and Gravel (SP-SM)

AASHTO: Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
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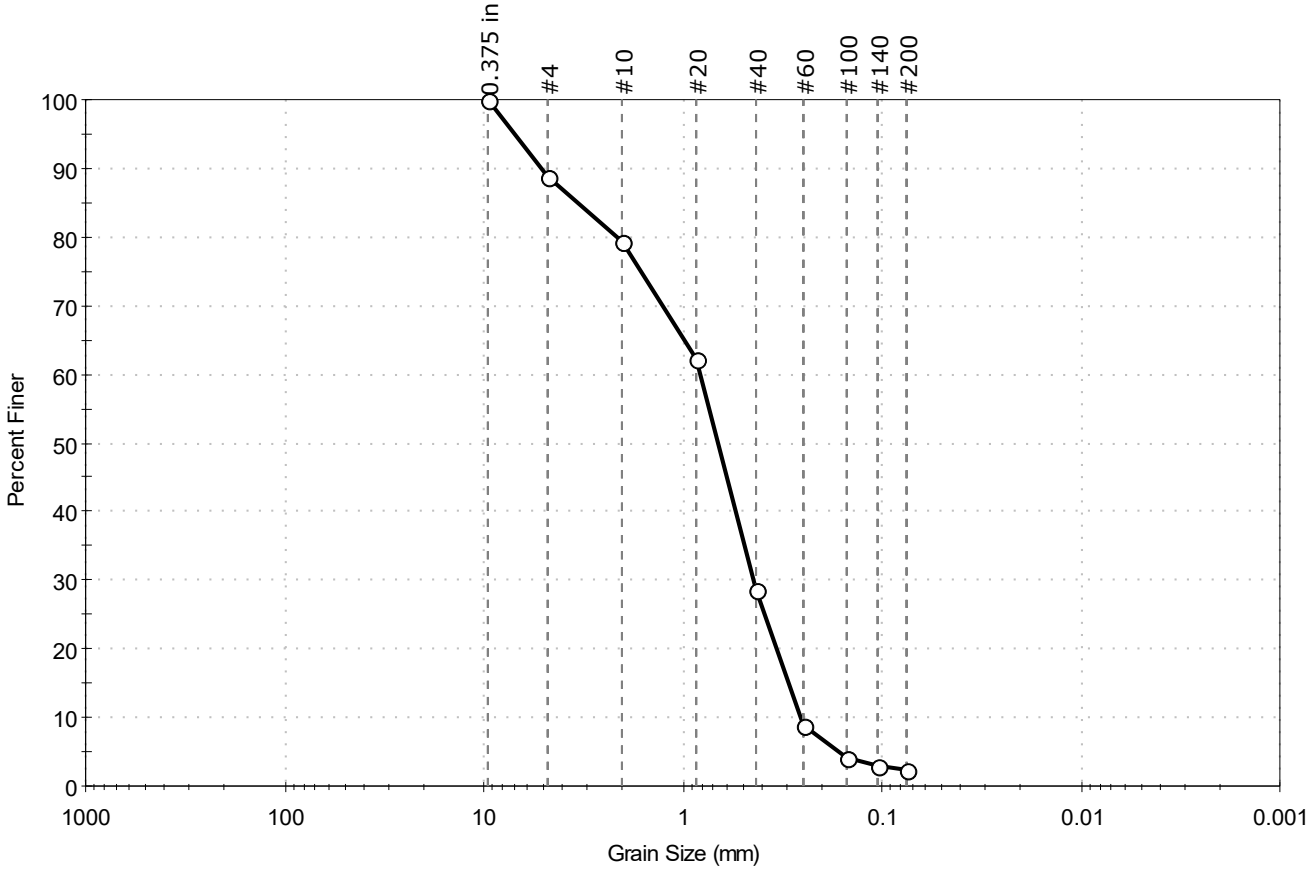
Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-4	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-11	Test Date:	03/24/25	Checked By:	ank
Depth :	30-32	Test Id:	807447		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	11.4	86.4	2.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	89		
#10	2.00	79		
#20	0.85	62		
#40	0.42	29		
#60	0.25	9		
#100	0.15	4		
#140	0.11	3		
#200	0.075	2.2		

Coefficients

D_{85} = 3.3891 mm
D_{30} = 0.4369 mm
D_{60} = 0.8120 mm
D_{15} = 0.2955 mm
D_{50} = 0.6604 mm
D_{10} = 0.2587 mm
C_u = 3.139
C_c = 0.909

Classification

ASTM: Poorly graded SAND (SP)

AASHTO: Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

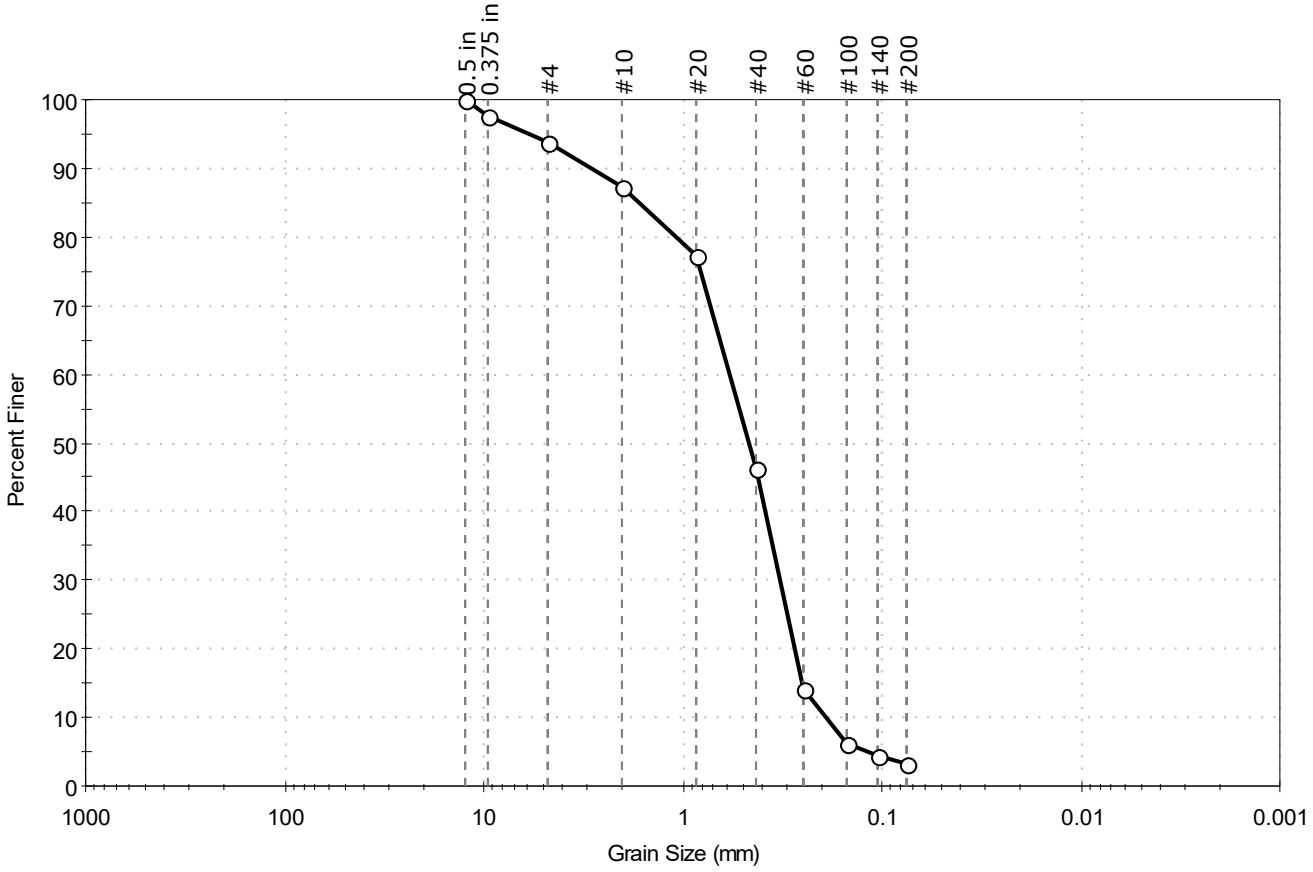
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-4	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-12	Test Date:	03/24/25	Checked By:	ank
Depth :	35-37	Test Id:	807448		
Test Comment:	---				
Visual Description:	Moist, very pale sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	6.2	90.5	3.3

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.5 in	12.50	100		
0.375 in	9.50	98		
#4	4.75	94		
#10	2.00	87		
#20	0.85	77		
#40	0.42	46		
#60	0.25	14		
#100	0.15	6		
#140	0.11	4		
#200	0.075	3.3		

Coefficients

D_{85} = 1.6483 mm	D_{30} = 0.3245 mm
D_{60} = 0.5770 mm	D_{15} = 0.2536 mm
D_{50} = 0.4608 mm	D_{10} = 0.1910 mm
C_u = 3.021	C_c = 0.955

Classification

ASTM — Poorly graded SAND (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

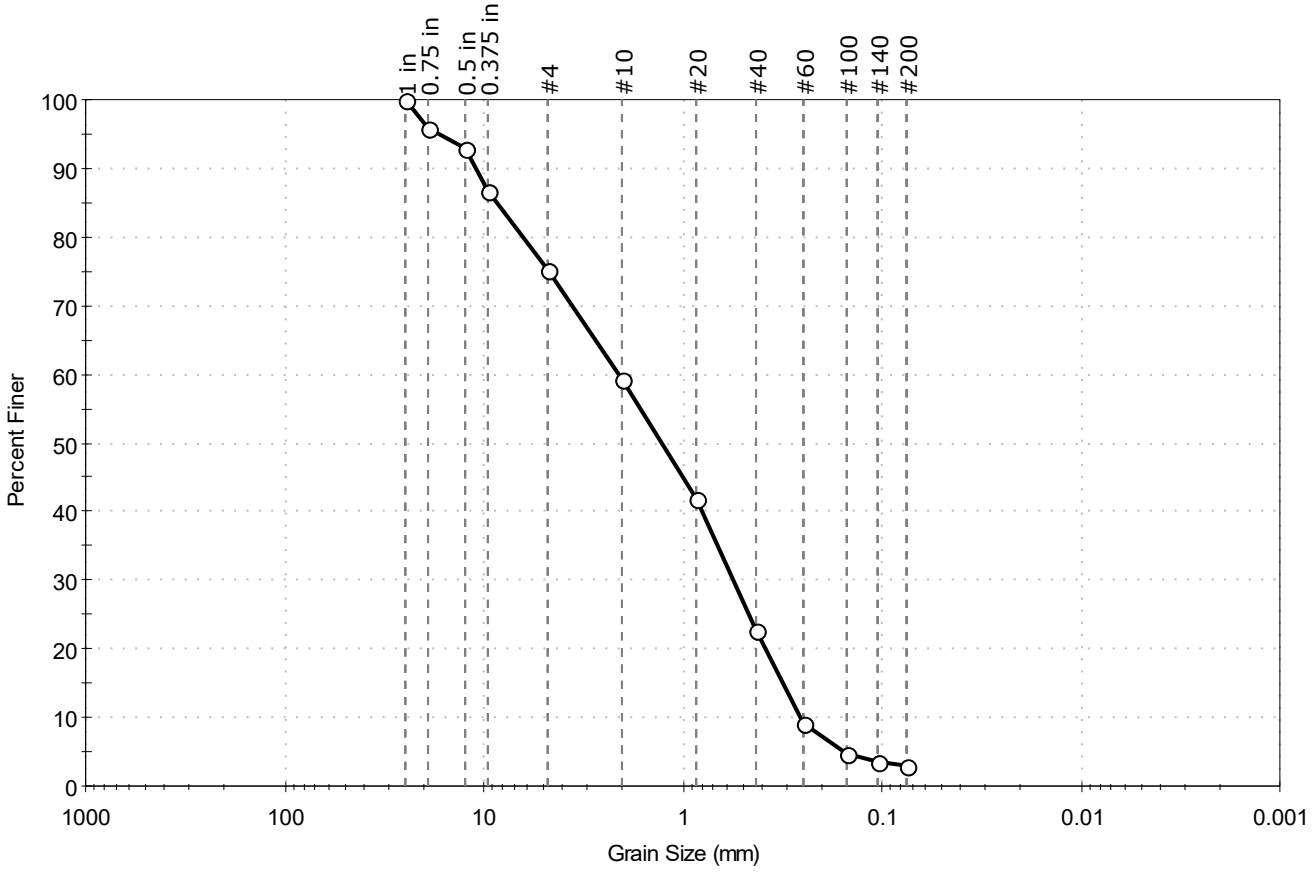
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-5	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-2	Test Date:	03/26/25	Checked By:	ank
Depth :	2-4	Test Id:	807451		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	24.8	72.4	2.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	96		
0.5 in	12.50	93		
0.375 in	9.50	87		
#4	4.75	75		
#10	2.00	59		
#20	0.85	42		
#40	0.42	23		
#60	0.25	9		
#100	0.15	5		
#140	0.11	4		
#200	0.075	2.8		

Coefficients

D_{85} = 8.5113 mm	D_{30} = 0.5536 mm
D_{60} = 2.0777 mm	D_{15} = 0.3148 mm
D_{50} = 1.2663 mm	D_{10} = 0.2589 mm
C_u = 8.025	C_c = 0.570

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

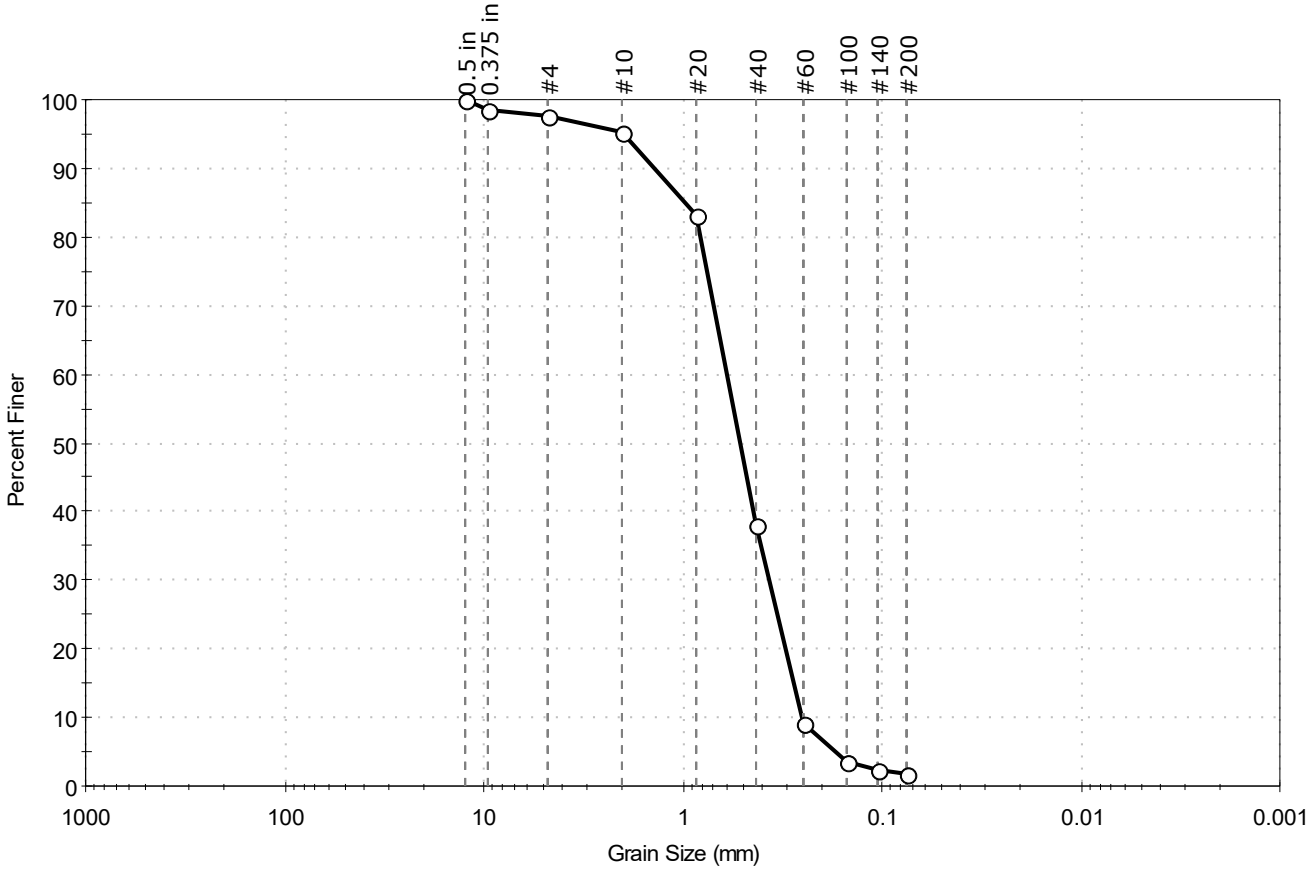
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-5	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-8	Test Date:	03/24/25	Checked By:	ank
Depth :	14-16	Test Id:	807452		
Test Comment:	---				
Visual Description:	Moist, light brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	2.2	95.9	1.9

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.5 in	12.50	100		
0.375 in	9.50	99		
#4	4.75	98		
#10	2.00	95		
#20	0.85	83		
#40	0.42	38		
#60	0.25	9		
#100	0.15	4		
#140	0.11	2		
#200	0.075	1.9		

Coefficients

D_{85} = 0.9685 mm	D_{30} = 0.3662 mm
D_{60} = 0.5952 mm	D_{15} = 0.2778 mm
D_{50} = 0.5104 mm	D_{10} = 0.2533 mm
C_u = 2.350	C_c = 0.889

Classification

ASTM — Poorly graded SAND (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

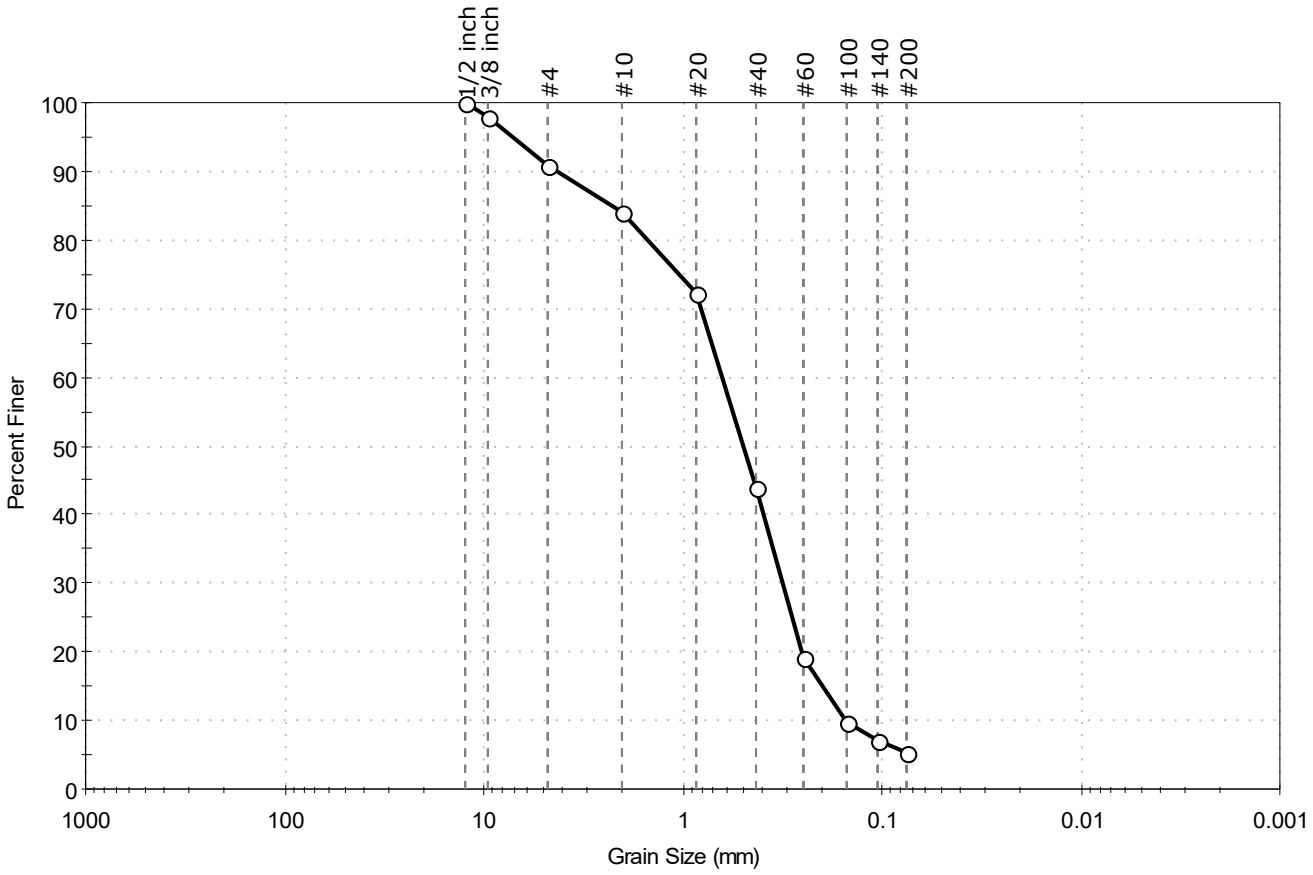
Sample/Test Description

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-5	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-10	Test Date:	03/24/25	Checked By:	ank
Depth :	25-27	Test Id:	807449		
Test Comment:	---				
Visual Description:	Moist, light brown sand with silt				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	9.3	85.3	5.4

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1/2 inch	12.50	100		
3/8 inch	9.50	98		
#4	4.75	91		
#10	2.00	84		
#20	0.85	72		
#40	0.42	44		
#60	0.25	19		
#100	0.15	10		
#140	0.11	7		
#200	0.075	5.4		

Coefficients

D_{85} = 2.2680 mm	D_{30} = 0.3154 mm
D_{60} = 0.6301 mm	D_{15} = 0.2002 mm
D_{50} = 0.4927 mm	D_{10} = 0.1528 mm
C_u = 4.124	C_c = 1.033

Classification

ASTM — Poorly graded SAND with Silt (SP-SM)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

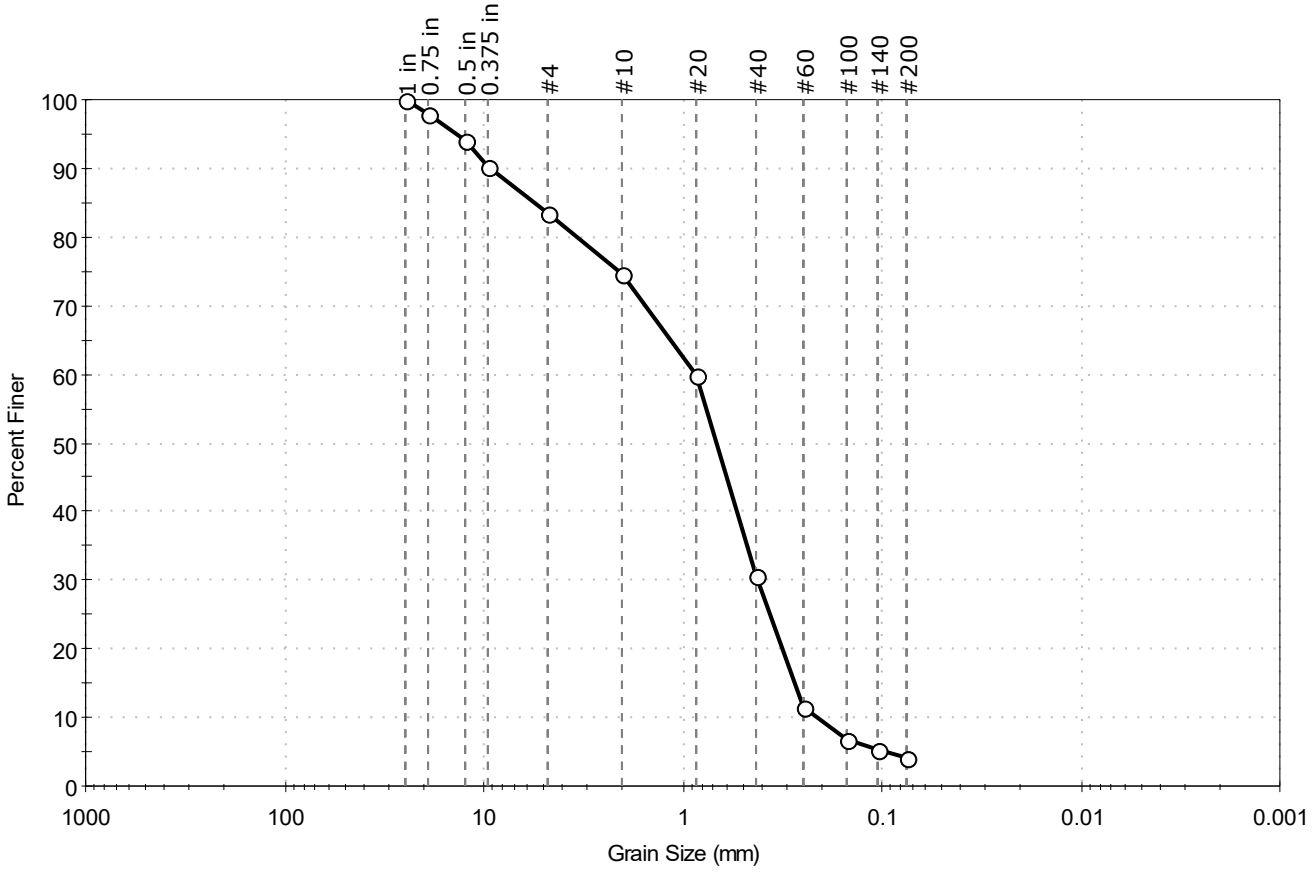
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-5	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-13	Test Date:	03/26/25	Checked By:	ank
Depth :	40-42	Test Id:	807450		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	16.5	79.3	4.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	98		
0.5 in	12.50	94		
0.375 in	9.50	90		
#4	4.75	83		
#10	2.00	75		
#20	0.85	60		
#40	0.42	31		
#60	0.25	12		
#100	0.15	7		
#140	0.11	5		
#200	0.075	4.2		

Coefficients

D_{85} = 5.5561 mm	D_{30} = 0.4170 mm
D_{60} = 0.8576 mm	D_{15} = 0.2748 mm
D_{50} = 0.6726 mm	D_{10} = 0.2113 mm
C_u = 4.059	C_c = 0.960

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

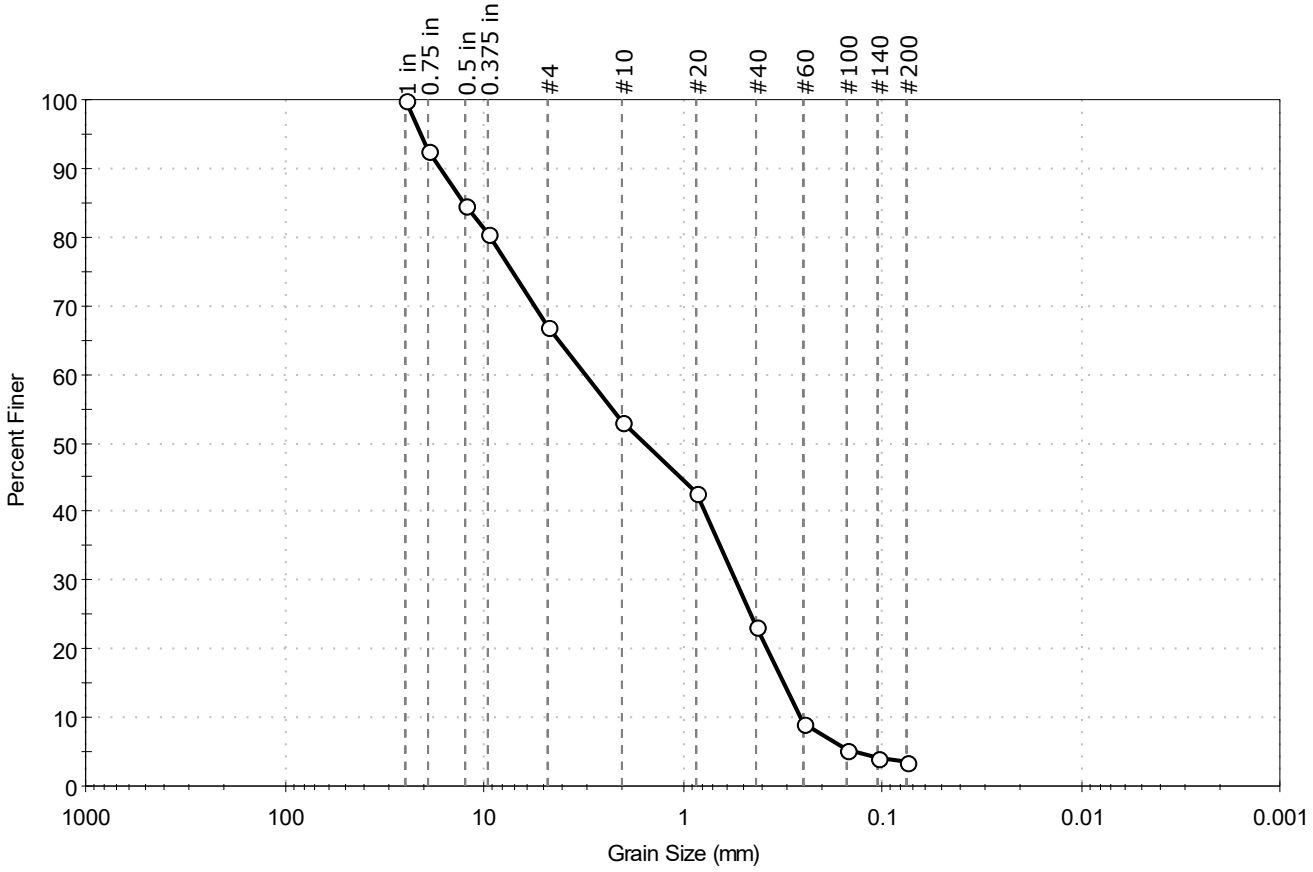
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-6	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-4	Test Date:	03/26/25	Checked By:	ank
Depth :	6-8	Test Id:	807453		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	33.1	63.5	3.4

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	93		
0.5 in	12.50	85		
0.375 in	9.50	81		
#4	4.75	67		
#10	2.00	53		
#20	0.85	43		
#40	0.42	23		
#60	0.25	9		
#100	0.15	5		
#140	0.11	4		
#200	0.075	3.4		

Coefficients

D_{85} = 12.6651 mm	D_{30} = 0.5411 mm
D_{60} = 3.0765 mm	D_{15} = 0.3117 mm
D_{50} = 1.5446 mm	D_{10} = 0.2579 mm
C_u = 11.929	C_c = 0.369

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

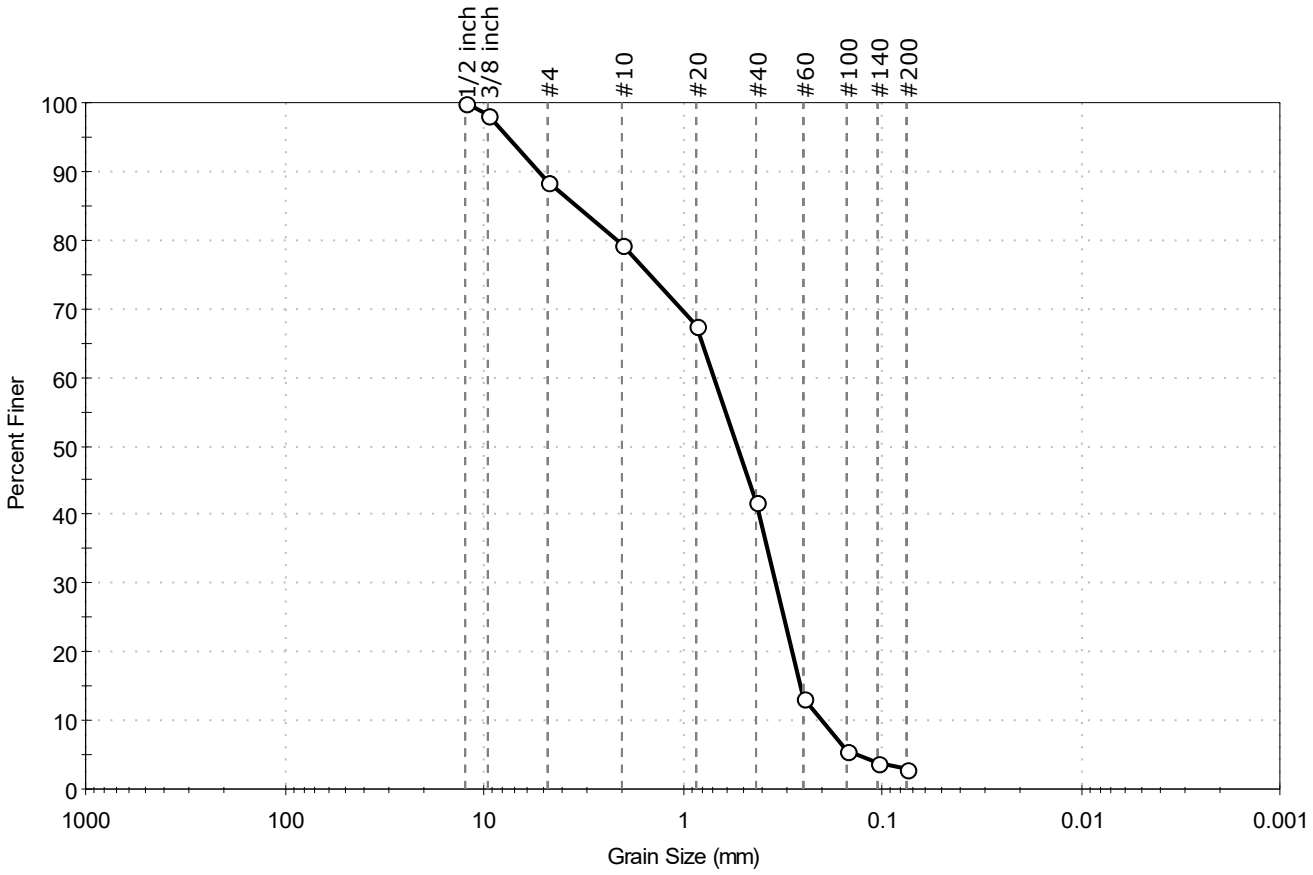
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-6	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-7	Test Date:	03/24/25	Checked By:	ank
Depth :	12-14	Test Id:	807486		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	11.4	85.5	3.1

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1/2 inch	12.50	100		
3/8 inch	9.50	98		
#4	4.75	89		
#10	2.00	79		
#20	0.85	68		
#40	0.42	42		
#60	0.25	13		
#100	0.15	6		
#140	0.11	4		
#200	0.075	3.1		

Coefficients

D_{85} = 3.4137 mm	D_{30} = 0.3411 mm
D_{60} = 0.6928 mm	D_{15} = 0.2585 mm
D_{50} = 0.5288 mm	D_{10} = 0.2021 mm
C_u = 3.428	C_c = 0.831

Classification

ASTM: Poorly graded SAND (SP)

AASHTO: Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

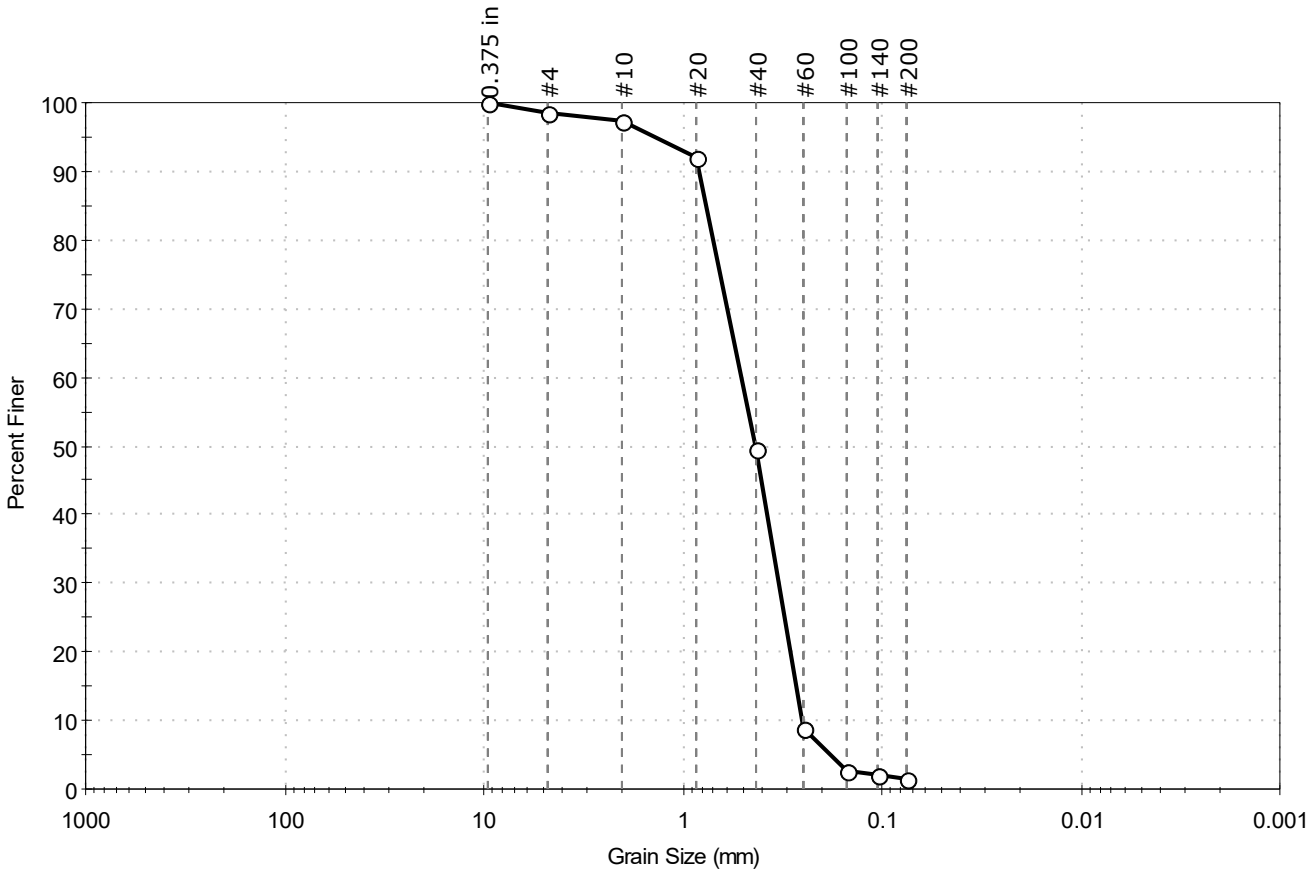
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-6	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-9	Test Date:	03/24/25	Checked By:	ank
Depth :	20-22	Test Id:	807487		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	1.6	97.0	1.4

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	98		
#10	2.00	97		
#20	0.85	92		
#40	0.42	50		
#60	0.25	9		
#100	0.15	3		
#140	0.11	2		
#200	0.075	1.4		

Coefficients

D_{85} = 0.7593 mm	D_{30} = 0.3293 mm
D_{60} = 0.5045 mm	D_{15} = 0.2706 mm
D_{50} = 0.4285 mm	D_{10} = 0.2535 mm
C_u = 1.990	C_c = 0.848

Classification

ASTM — Poorly graded SAND (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

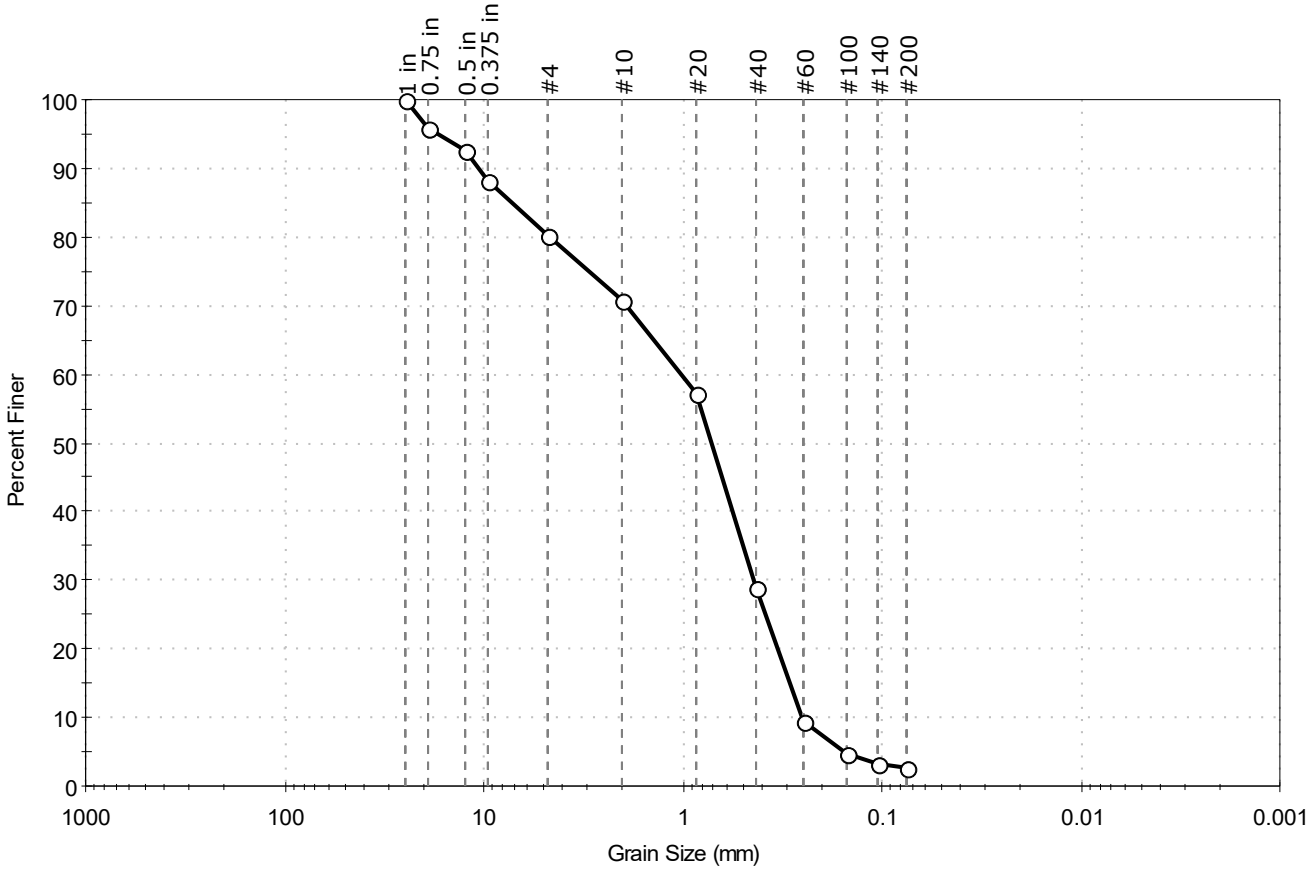
Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-6	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-15	Test Date:	03/26/25	Checked By:	ank
Depth :	50-52	Test Id:	807488		
Test Comment:	---				
Visual Description:	Moist, brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	19.8	77.7	2.5

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	96		
0.5 in	12.50	93		
0.375 in	9.50	88		
#4	4.75	80		
#10	2.00	71		
#20	0.85	57		
#40	0.42	29		
#60	0.25	10		
#100	0.15	5		
#140	0.11	3		
#200	0.075	2.5		

Coefficients

D_{85} = 7.2393 mm	D_{30} = 0.4370 mm
D_{60} = 1.0116 mm	D_{15} = 0.2902 mm
D_{50} = 0.7119 mm	D_{10} = 0.2529 mm
C_u = 4.000	C_c = 0.746

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

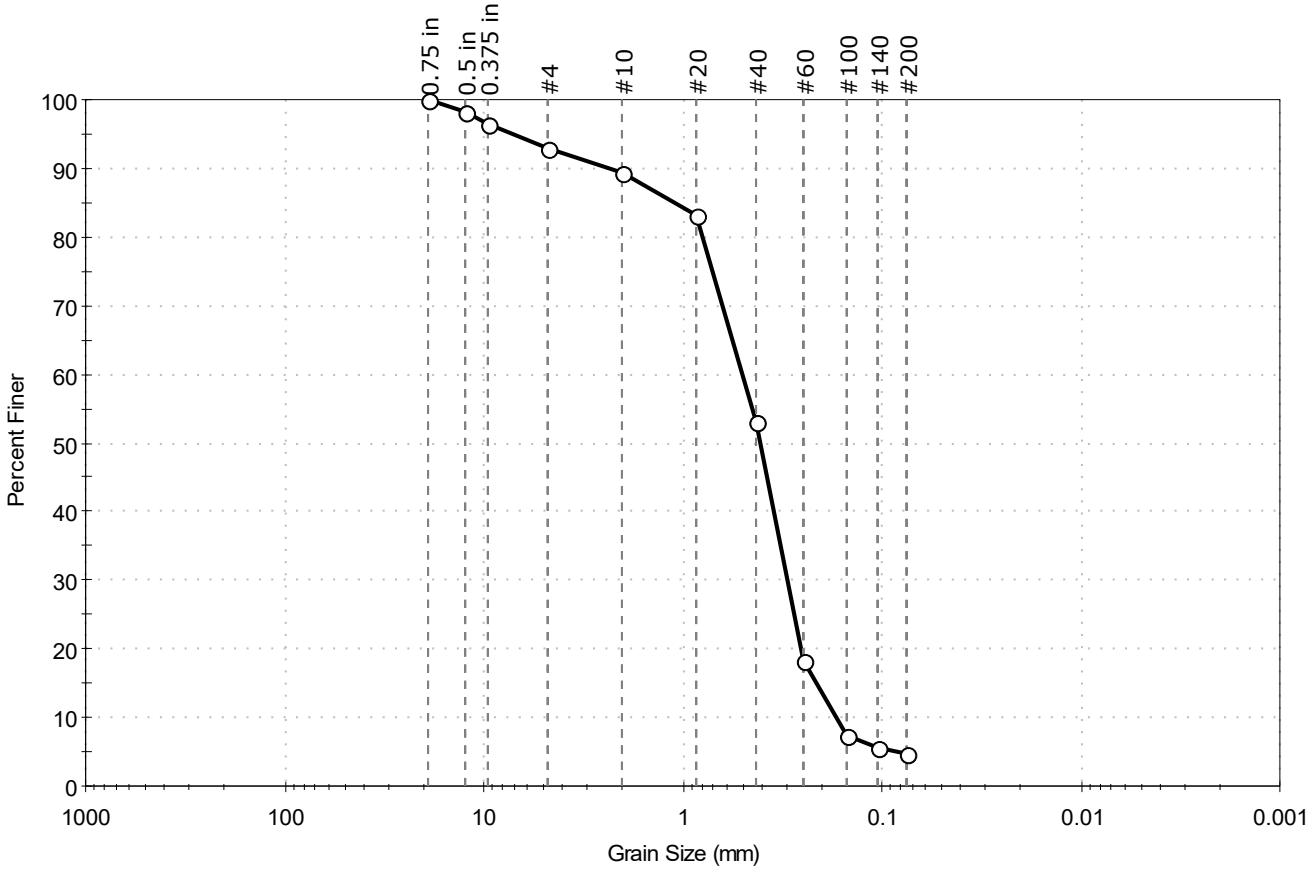
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-7	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-3	Test Date:	03/24/25	Checked By:	ank
Depth :	4-6	Test Id:	807489		
Test Comment:	---				
Visual Description:	Moist, red sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	7.0	88.3	4.7

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.75 in	19.00	100		
0.5 in	12.50	98		
0.375 in	9.50	96		
#4	4.75	93		
#10	2.00	89		
#20	0.85	83		
#40	0.42	53		
#60	0.25	18		
#100	0.15	7		
#140	0.11	6		
#200	0.075	4.7		

Coefficients

D_{85} = 1.1074 mm	D_{30} = 0.2987 mm
D_{60} = 0.4986 mm	D_{15} = 0.2142 mm
D_{50} = 0.4054 mm	D_{10} = 0.1702 mm
C_u = 2.929	C_c = 1.051

Classification

ASTM Poorly graded SAND (SP)

AASHTO Fine Sand (A-3 (1))

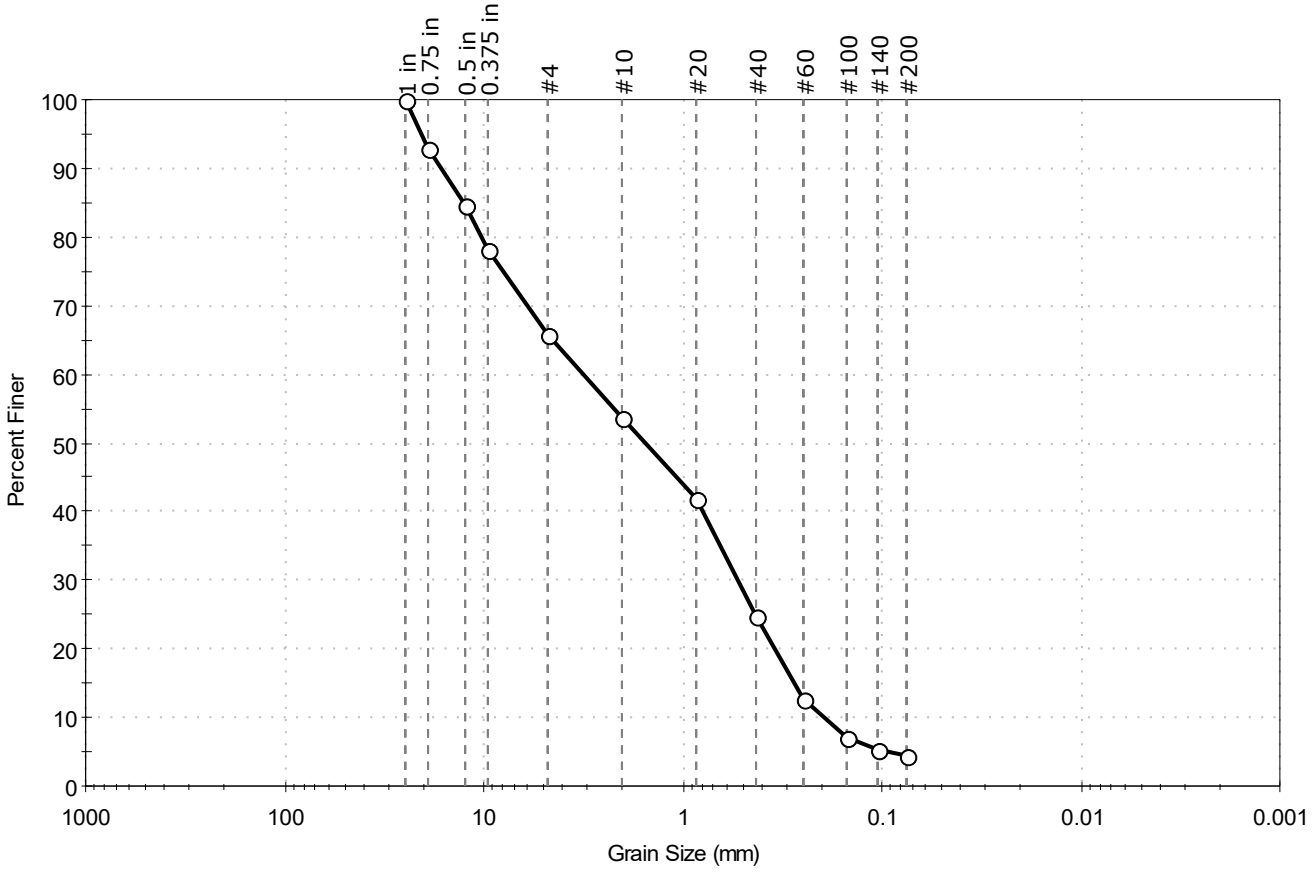
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-7	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-9	Test Date:	03/26/25	Checked By:	ank
Depth :	20-22	Test Id:	807490		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	34.4	61.3	4.3

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	93		
0.5 in	12.50	85		
0.375 in	9.50	78		
#4	4.75	66		
#10	2.00	54		
#20	0.85	42		
#40	0.42	25		
#60	0.25	13		
#100	0.15	7		
#140	0.11	5		
#200	0.075	4.3		

Coefficients

D_{85} = 12.7188 mm	D_{30} = 0.5247 mm
D_{60} = 3.1512 mm	D_{15} = 0.2772 mm
D_{50} = 1.5254 mm	D_{10} = 0.1966 mm
C_u = 16.028	C_c = 0.444

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

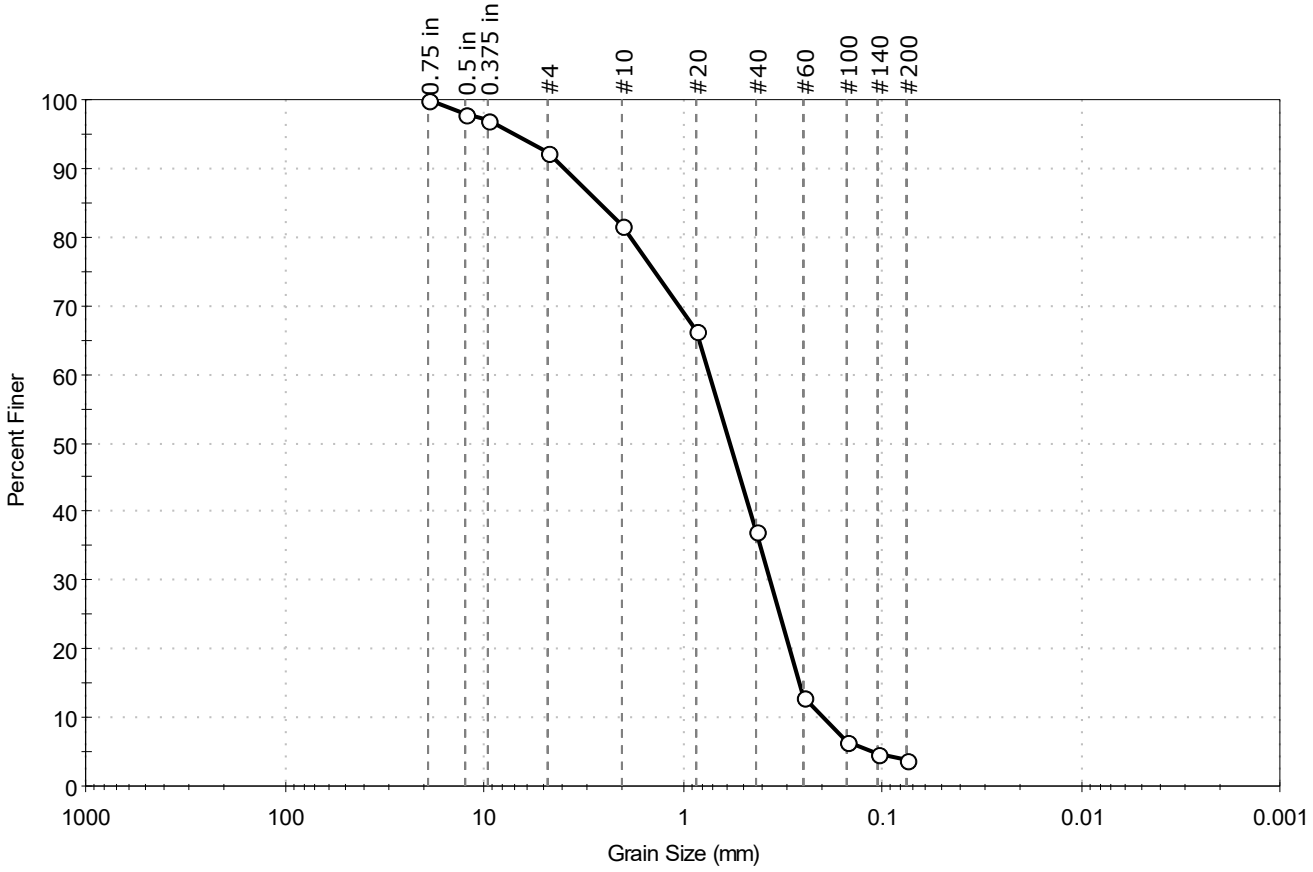
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-7	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-11	Test Date:	03/26/25	Checked By:	ank
Depth :	30-32	Test Id:	807491		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	7.8	88.4	3.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.75 in	19.00	100		
0.5 in	12.50	98		
0.375 in	9.50	97		
#4	4.75	92		
#10	2.00	82		
#20	0.85	66		
#40	0.42	37		
#60	0.25	13		
#100	0.15	6		
#140	0.11	5		
#200	0.075	3.8		

Coefficients

D_{85} = 2.6358 mm	D_{30} = 0.3626 mm
D_{60} = 0.7311 mm	D_{15} = 0.2606 mm
D_{50} = 0.5762 mm	D_{10} = 0.1974 mm
C_u = 3.704	C_c = 0.911

Classification

ASTM — Poorly graded SAND (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

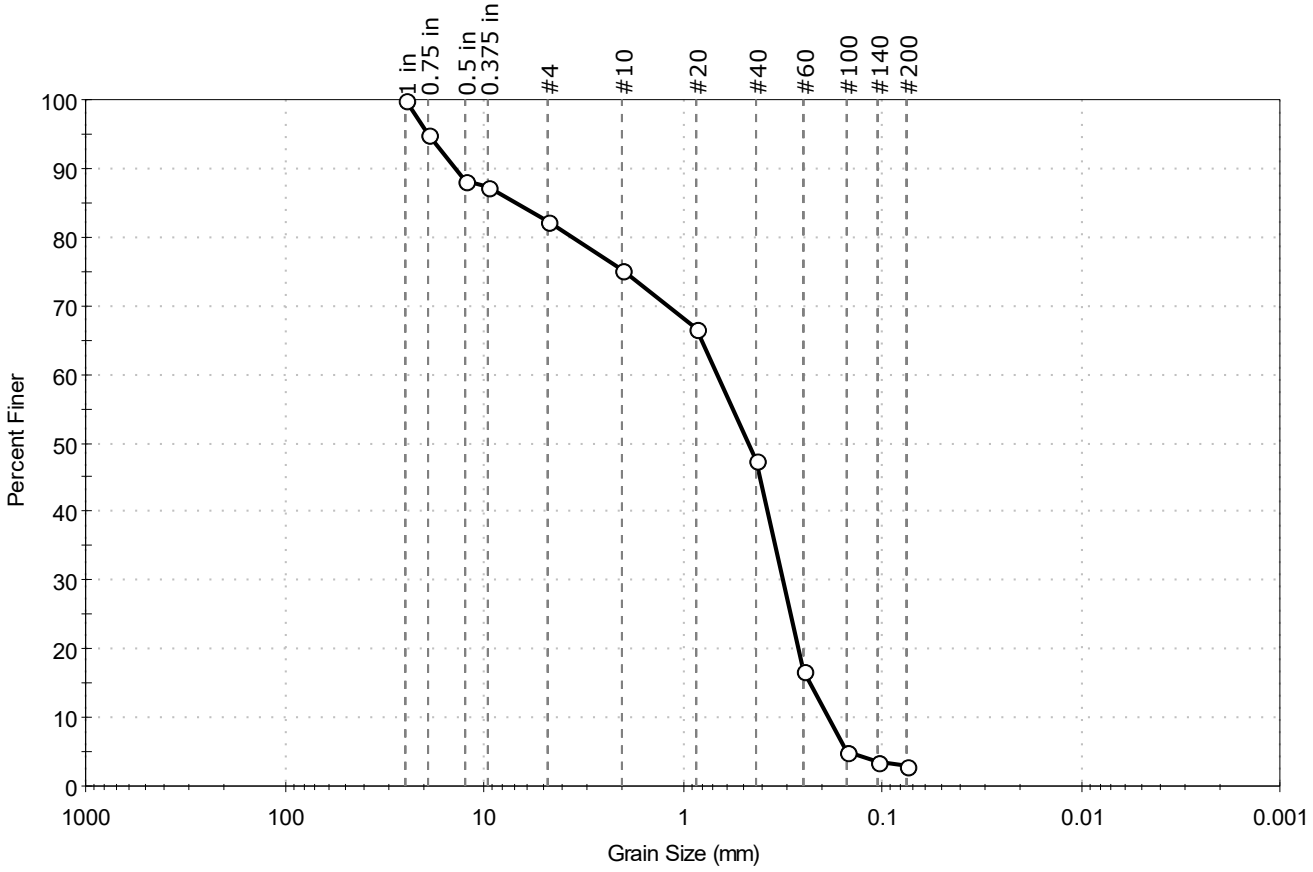
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-7	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-12	Test Date:	03/26/25	Checked By:	ank
Depth :	35-37	Test Id:	807492		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	17.6	79.6	2.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	95		
0.5 in	12.50	88		
0.375 in	9.50	87		
#4	4.75	82		
#10	2.00	75		
#20	0.85	67		
#40	0.42	47		
#60	0.25	17		
#100	0.15	5		
#140	0.11	4		
#200	0.075	2.8		

Coefficients

D_{85} = 6.8976 mm	D_{30} = 0.3145 mm
D_{60} = 0.6684 mm	D_{15} = 0.2322 mm
D_{50} = 0.4656 mm	D_{10} = 0.1865 mm
C_u = 3.584	C_c = 0.793

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

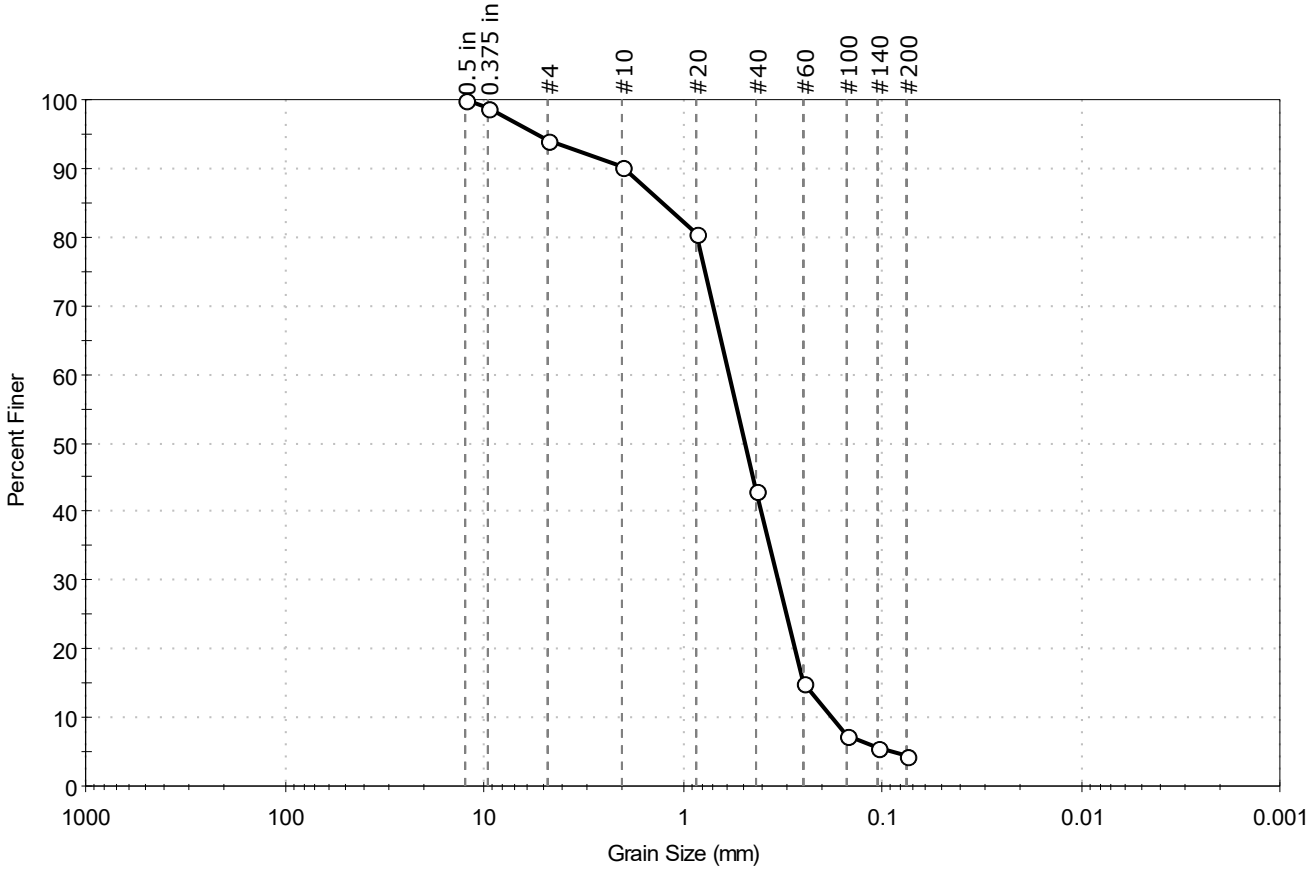
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-8	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-3	Test Date:	03/24/25	Checked By:	ank
Depth :	4-6	Test Id:	807493		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	6.0	89.7	4.3

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.5 in	12.50	100		
0.375 in	9.50	99		
#4	4.75	94		
#10	2.00	90		
#20	0.85	80		
#40	0.42	43		
#60	0.25	15		
#100	0.15	7		
#140	0.11	6		
#200	0.075	4.3		

Coefficients

D_{85} = 1.2616 mm	D_{30} = 0.3319 mm
D_{60} = 0.5812 mm	D_{15} = 0.2505 mm
D_{50} = 0.4825 mm	D_{10} = 0.1788 mm
C_u = 3.251	C_c = 1.060

Classification

ASTM — Poorly graded SAND (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

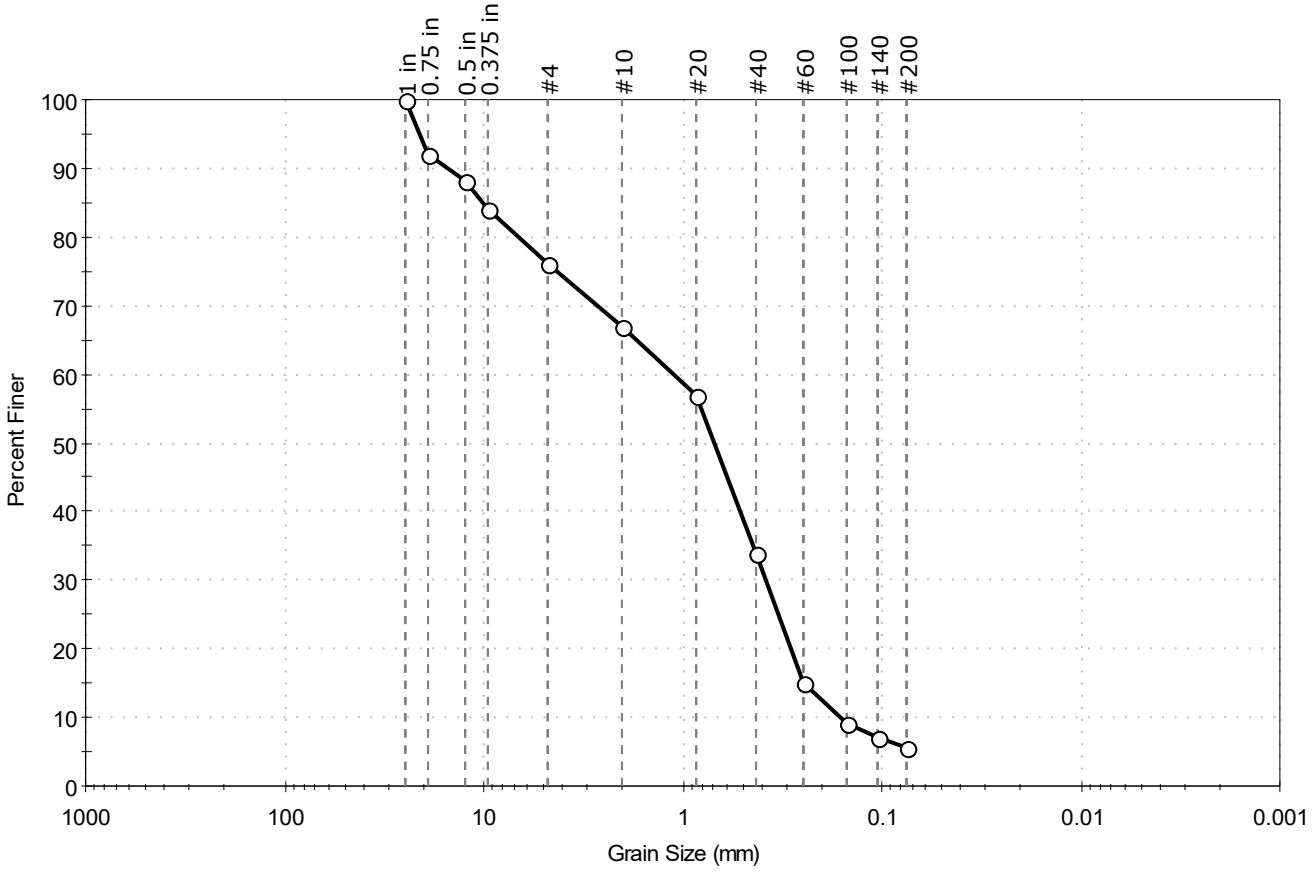
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-8	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-4	Test Date:	03/26/25	Checked By:	ank
Depth :	6-8	Test Id:	807522		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand with silt and gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	23.9	70.5	5.6

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	92		
0.5 in	12.50	88		
0.375 in	9.50	84		
#4	4.75	76		
#10	2.00	67		
#20	0.85	57		
#40	0.42	34		
#60	0.25	15		
#100	0.15	9		
#140	0.11	7		
#200	0.075	5.6		

Coefficients

D_{85} = 10.1321 mm	D_{30} = 0.3819 mm
D_{60} = 1.0980 mm	D_{15} = 0.2492 mm
D_{50} = 0.6890 mm	D_{10} = 0.1601 mm
C_u = 6.858	C_c = 0.830

Classification

ASTM — Poorly graded SAND with Silt and Gravel (SP-SM)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

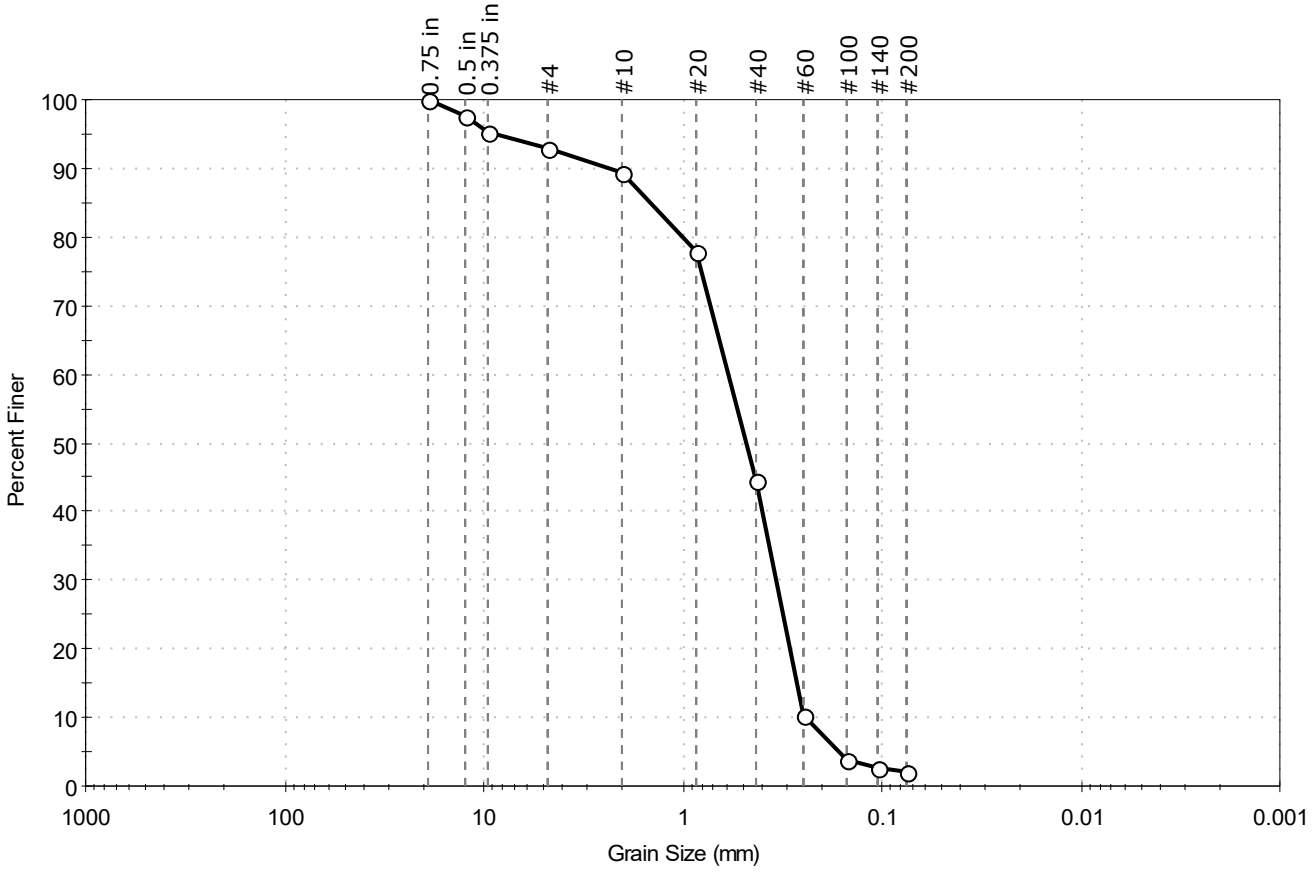
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-8	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-8	Test Date:	03/24/25	Checked By:	ank
Depth :	14-16	Test Id:	807529		
Test Comment:	---				
Visual Description:	Moist, reddish yellow sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	7.0	91.0	2.0

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.75 in	19.00	100		
0.5 in	12.50	98		
0.375 in	9.50	95		
#4	4.75	93		
#10	2.00	89		
#20	0.85	78		
#40	0.42	45		
#60	0.25	10		
#100	0.15	4		
#140	0.11	3		
#200	0.075	2.0		

Coefficients

D_{85} = 1.4355 mm
D_{30} = 0.3388 mm
D_{60} = 0.5855 mm
D_{15} = 0.2683 mm
D_{50} = 0.4759 mm
D_{10} = 0.2413 mm
C_u = 2.426
C_c = 0.812

Classification

ASTM — Poorly graded SAND (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

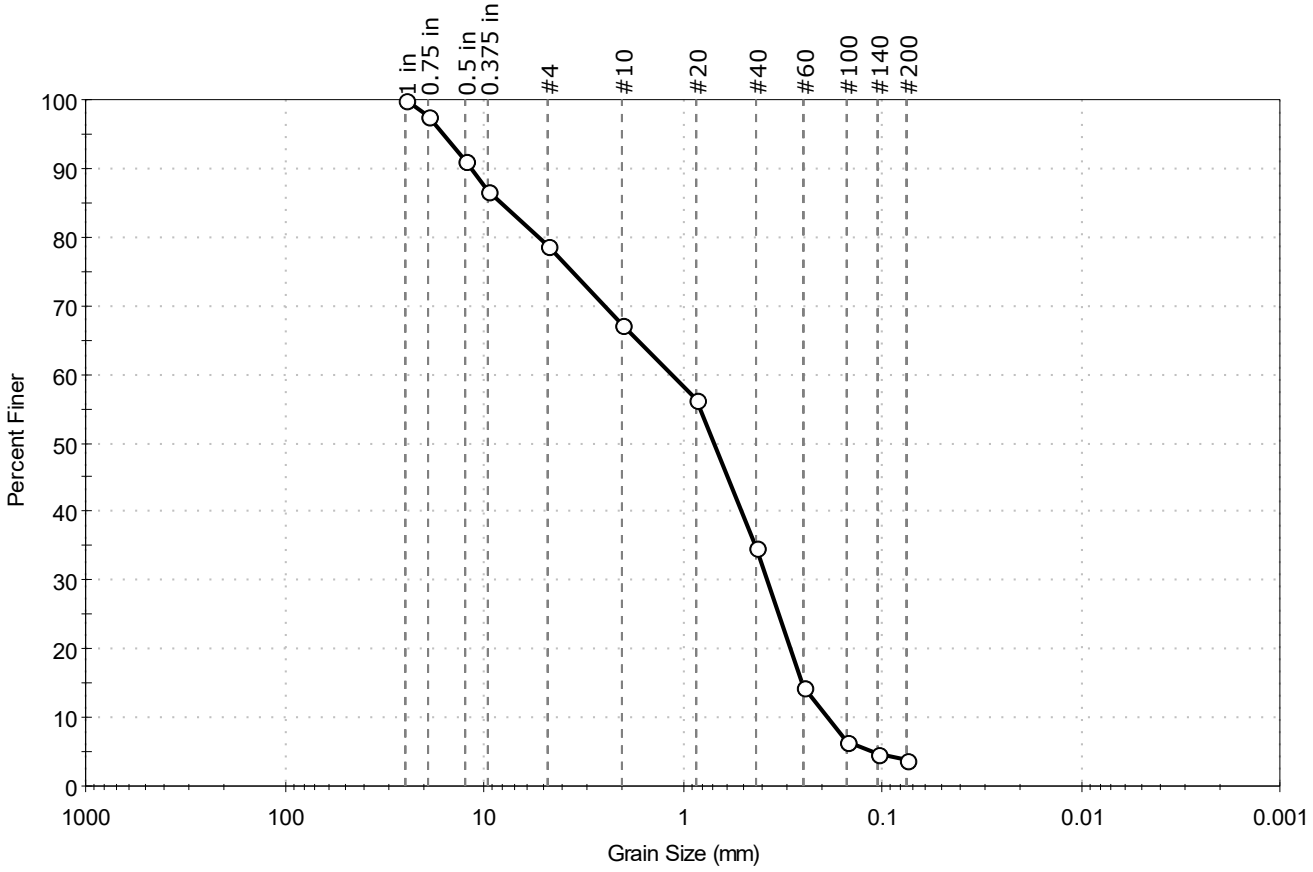
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-8	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-10	Test Date:	03/26/25	Checked By:	ank
Depth :	25-27	Test Id:	807523		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	21.1	75.2	3.7

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	98		
0.5 in	12.50	91		
0.375 in	9.50	87		
#4	4.75	79		
#10	2.00	67		
#20	0.85	56		
#40	0.42	35		
#60	0.25	14		
#100	0.15	7		
#140	0.11	5		
#200	0.075	3.7		

Coefficients

D_{85} =8.0724 mm	D_{30} =0.3759 mm
D_{60} =1.1212 mm	D_{15} =0.2538 mm
D_{50} =0.6918 mm	D_{10} =0.1870 mm
C_u =5.996	C_c =0.674

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

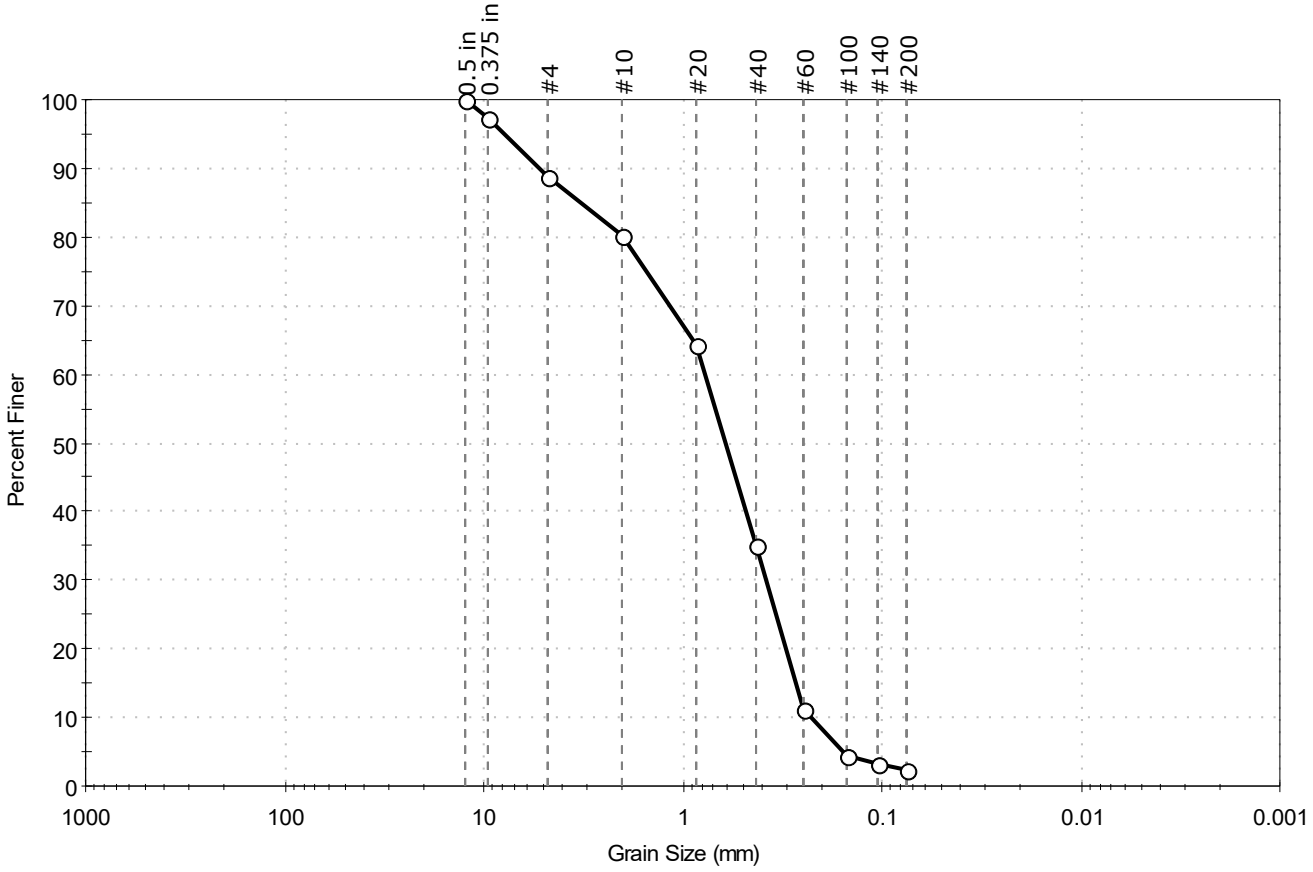
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-8	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-13	Test Date:	03/24/25	Checked By:	ank
Depth :	40-42	Test Id:	807524		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	11.3	86.3	2.4

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.5 in	12.50	100		
0.375 in	9.50	97		
#4	4.75	89		
#10	2.00	80		
#20	0.85	64		
#40	0.42	35		
#60	0.25	11		
#100	0.15	4		
#140	0.11	3		
#200	0.075	2.4		

Coefficients

D_{85} = 3.2568 mm	D_{30} = 0.3791 mm
D_{60} = 0.7659 mm	D_{15} = 0.2722 mm
D_{50} = 0.6042 mm	D_{10} = 0.2288 mm
C_u = 3.347	C_c = 0.820

Classification

ASTM — Poorly graded SAND (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

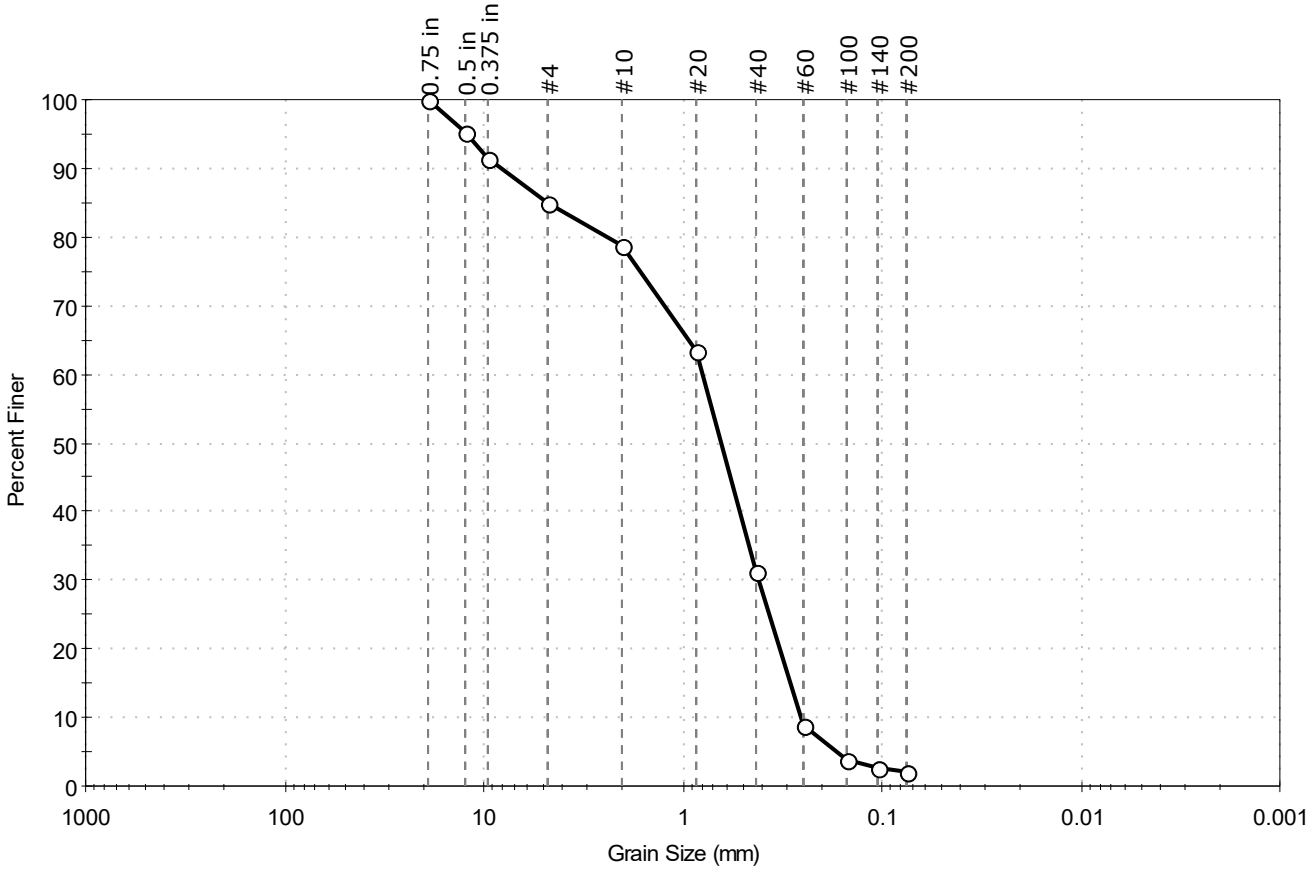
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-9	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-3	Test Date:	03/24/25	Checked By:	ank
Depth :	4-6	Test Id:	807525		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	15.0	82.9	2.1

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.75 in	19.00	100		
0.5 in	12.50	95		
0.375 in	9.50	91		
#4	4.75	85		
#10	2.00	79		
#20	0.85	63		
#40	0.42	31		
#60	0.25	9		
#100	0.15	4		
#140	0.11	3		
#200	0.075	2.1		

Coefficients

D_{85} =4.7440 mm	D_{30} =0.4129 mm
D_{60} =0.7911 mm	D_{15} =0.2886 mm
D_{50} =0.6376 mm	D_{10} =0.2561 mm
C_u =3.089	C_c =0.841

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

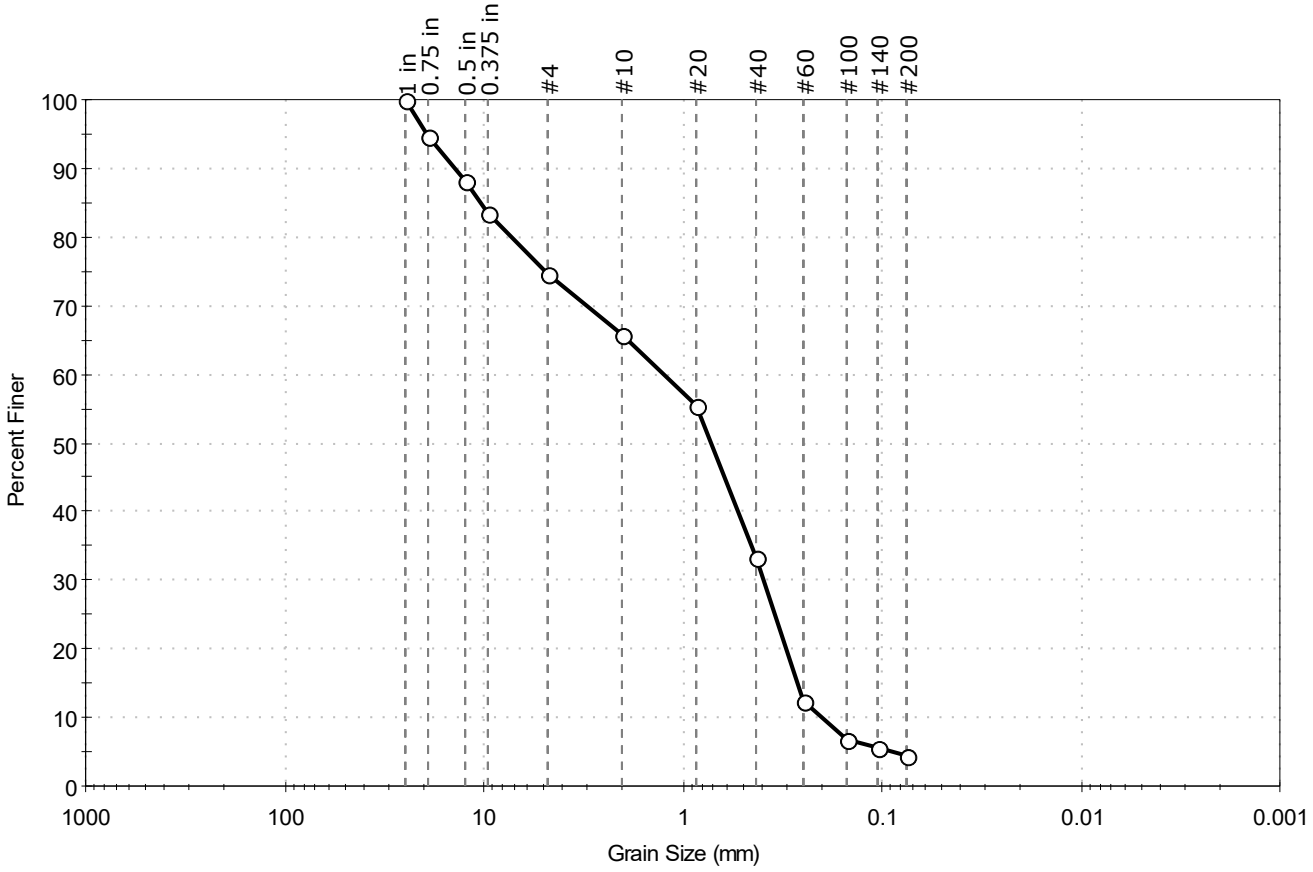
Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

GeoTesting EXPRESS
A Sercel Business

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-9	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-4	Test Date:	03/26/25	Checked By:	ank
Depth :	6-8	Test Id:	807526		
Test Comment:	---				
Visual Description:	Moist, light brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	25.2	70.3	4.5

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1 in	25.00	100		
0.75 in	19.00	95		
0.5 in	12.50	88		
0.375 in	9.50	84		
#4	4.75	75		
#10	2.00	66		
#20	0.85	55		
#40	0.42	33		
#60	0.25	12		
#100	0.15	7		
#140	0.11	5		
#200	0.075	4.5		

Coefficients

D_{85} = 10.3445 mm
D_{30} = 0.3918 mm
D_{60} = 1.2452 mm
D_{15} = 0.2675 mm
D_{50} = 0.7187 mm
D_{10} = 0.2006 mm
C_u = 6.207
C_c = 0.615

Classification

ASTM: Poorly graded SAND with Gravel (SP)

AASHTO: Stone Fragments, Gravel and Sand (A-1-b (1))

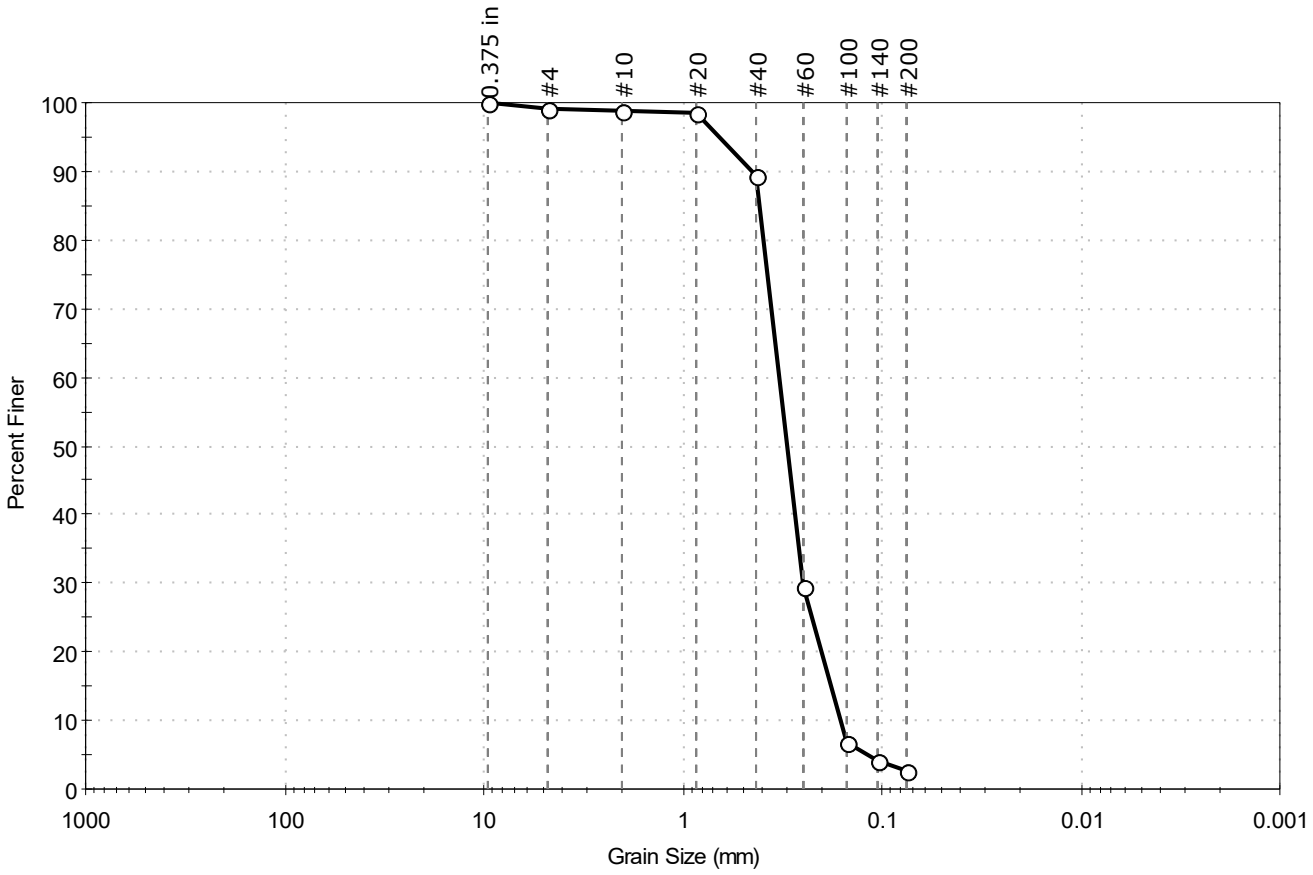
Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-9	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-8	Test Date:	03/24/25	Checked By:	ank
Depth :	14-16	Test Id:	807527		
Test Comment:	---				
Visual Description:	Moist, pale brown sand				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	1.0	96.2	2.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.375 in	9.50	100		
#4	4.75	99		
#10	2.00	99		
#20	0.85	99		
#40	0.42	89		
#60	0.25	29		
#100	0.15	7		
#140	0.11	4		
#200	0.075	2.8		

Coefficients

D_{85} = 0.4089 mm	D_{30} = 0.2513 mm
D_{60} = 0.3277 mm	D_{15} = 0.1806 mm
D_{50} = 0.2999 mm	D_{10} = 0.1614 mm
C_u = 2.030	C_c = 1.194

Classification

ASTM Poorly graded SAND (SP)

AASHTO Fine Sand (A-3 (1))

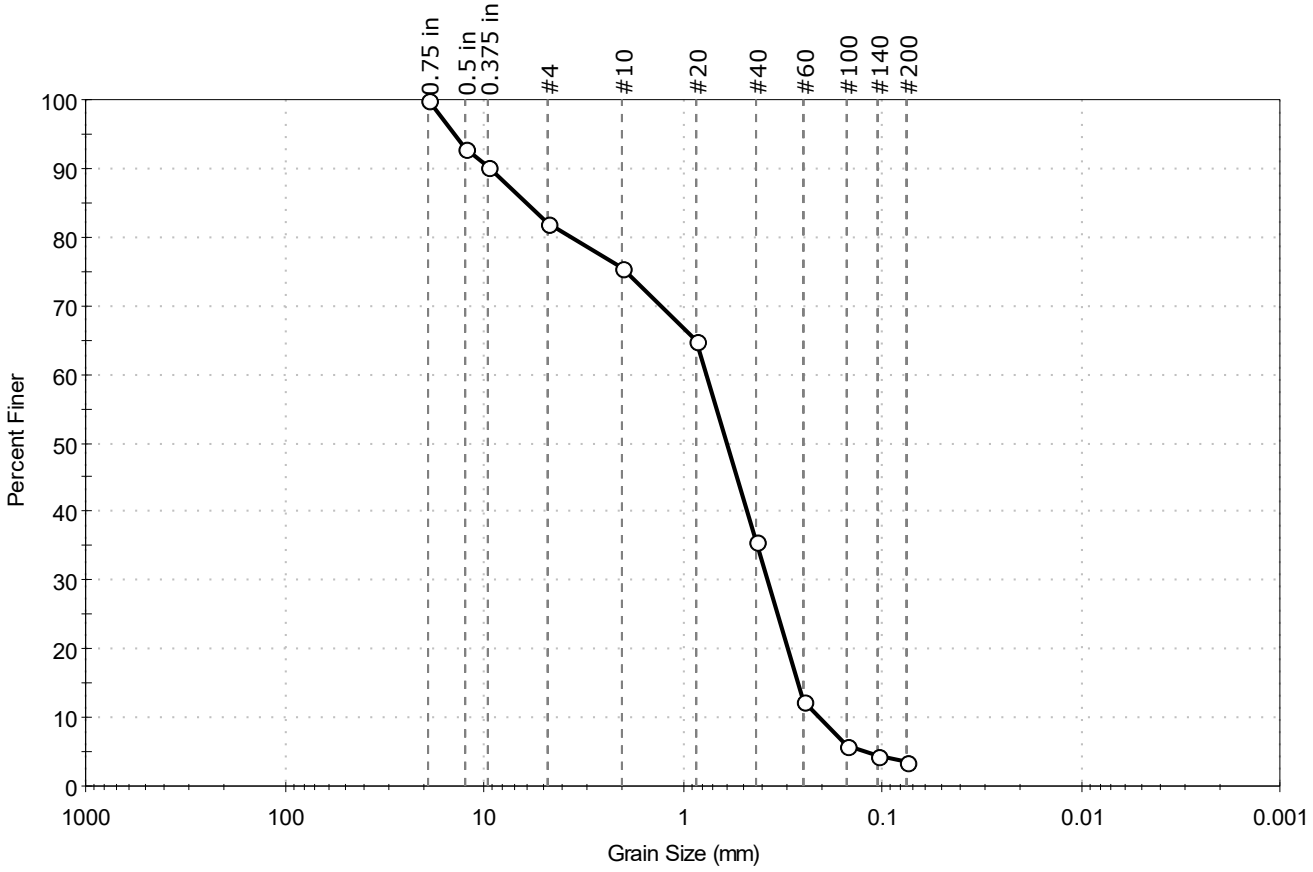
Sample/Test Description

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-9	Sample Type:	Bag	Tested By:	ajl
Sample ID:	SS-14	Test Date:	03/26/25	Checked By:	ank
Depth :	45-47	Test Id:	807528		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Particle Size Analysis - ASTM D6913



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	18.1	78.4	3.5

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.75 in	19.00	100		
0.5 in	12.50	93		
0.375 in	9.50	90		
#4	4.75	82		
#10	2.00	75		
#20	0.85	65		
#40	0.42	36		
#60	0.25	12		
#100	0.15	6		
#140	0.11	4		
#200	0.075	3.5		

Coefficients

D_{85} = 6.1725 mm	D_{30} = 0.3736 mm
D_{60} = 0.7551 mm	D_{15} = 0.2657 mm
D_{50} = 0.5962 mm	D_{10} = 0.2074 mm
C_u = 3.641	C_c = 0.891

Classification

ASTM — Poorly graded SAND with Gravel (SP)

AASHTO — Stone Fragments, Gravel and Sand (A-1-b (1))

Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-1	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-1	Test Date:	03/17/25	Checked By:	ank
Depth :	0-2	Test Id:	807333		
Test Comment:	---				
Visual Description:	Moist, dark grayish brown silty sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-1	SB-1	0-2	9	n/a	n/a	n/a	n/a	Silty SAND (SM)

27% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: n/a
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-1	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-3	Test Date:	03/17/25	Checked By:	ank
Depth :	4-6	Test Id:	807334		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand with silt and gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-3	SB-1	4-6	1	n/a	n/a	n/a	n/a	Poorly graded SAND with Silt and Gravel (SP-SM)

77% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-1	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-12	Test Date:	03/17/25	Checked By:	ank
Depth :	35-37	Test Id:	807335		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-12	SB-1	35-37	2	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

67% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-1	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-14	Test Date:	03/21/25	Checked By:	ank
Depth :	45-47	Test Id:	807336		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-14	SB-1	45-47	2	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

79% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: LOW

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-2	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-2	Test Date:	03/17/25	Checked By:	ank
Depth :	2-4	Test Id:	807337		
Test Comment:	---				
Visual Description:	Moist, dark brown silty sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-2	SB-2	2-4	8	n/a	n/a	n/a	n/a	Silty SAND (SM)

41% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-2	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-3	Test Date:	03/17/25	Checked By:	ank
Depth :	4-6	Test Id:	807338		
Test Comment:	---				
Visual Description:	Moist, pale brown silty sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-3	SB-2	4-6	12	n/a	n/a	n/a	n/a	Silty SAND (SM)

18% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: n/a
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-2	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-8	Test Date:	03/17/25	Checked By:	ank
Depth :	14-16	Test Id:	807339		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-8	SB-2	14-16	2	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

64% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-2	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-11	Test Date:	03/17/25	Checked By:	ank
Depth :	30-32	Test Id:	807389		
Test Comment:	---				
Visual Description:	Moist, very pale sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-11	SB-2	30-32	3	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

40% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: HIGH
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-3	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-2	Test Date:	03/17/25	Checked By:	ank
Depth :	2-4	Test Id:	807390		
Test Comment:	---				
Visual Description:	Moist, brown silty sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-2	SB-3	2-4	10	n/a	n/a	n/a	n/a	Silty SAND (SM)

36% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-3	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-3	Test Date:	03/21/25	Checked By:	ank
Depth :	4-6	Test Id:	807391		
Test Comment:	---				
Visual Description:	Moist, yellowsih brown sand with silt and gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-3	SB-3	4-6	2	n/a	n/a	n/a	n/a	Poorly graded SAND with Silt and Gravel (SP-SM)

62% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-3	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-9	Test Date:	03/21/25	Checked By:	ank
Depth :	20-22	Test Id:	807392		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-9	SB-3	20-22	4	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

67% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-3	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-14	Test Date:	03/17/25	Checked By:	ank
Depth :	45-47	Test Id:	807393		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand with silt				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-14	SB-3	45-47	4	n/a	n/a	n/a	n/a	Poorly graded SAND with Silt (SP-SM)

22% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-4	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-3	Test Date:	03/17/25	Checked By:	ank
Depth :	4-6	Test Id:	807394		
Test Comment:	---				
Visual Description:	Moist, very dark brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-3	SB-4	4-6	7	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

80% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-4	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-9	Test Date:	03/24/25	Checked By:	ank
Depth :	20-22	Test Id:	807395		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with silt and gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-9	SB-4	20-22	2	n/a	n/a	n/a	n/a	Poorly graded SAND with Silt and Gravel (SP-SM)

67% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-4	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-11	Test Date:	03/17/25	Checked By:	ank
Depth :	30-32	Test Id:	807433		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-11	SB-4	30-32	2	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

71% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-4	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-12	Test Date:	03/17/25	Checked By:	ank
Depth :	35-37	Test Id:	807434		
Test Comment:	---				
Visual Description:	Moist, very pale sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-12	SB-4	35-37	2	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

54% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-5	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-2	Test Date:	03/21/25	Checked By:	ank
Depth :	2-4	Test Id:	807435		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-2	SB-5	2-4	2	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

77% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-5	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-8	Test Date:	03/17/25	Checked By:	ank
Depth :	14-16	Test Id:	807436		
Test Comment:	---				
Visual Description:	Moist, light brown sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-8	SB-5	14-16	3	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

62% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-5	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-10	Test Date:	03/17/25	Checked By:	ank
Depth :	25-27	Test Id:	807437		
Test Comment:	---				
Visual Description:	Moist, light brown sand with silt				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-10	SB-5	25-27	3	n/a	n/a	n/a	n/a	Poorly graded SAND with Silt (SP-SM)

56% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-5	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-13	Test Date:	03/24/25	Checked By:	ank
Depth :	40-42	Test Id:	807438		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-13	SB-5	40-42	3	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

69% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: LOW

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-6	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-4	Test Date:	03/24/25	Checked By:	ank
Depth :	6-8	Test Id:	807439		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-4	SB-6	6-8	3	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

77% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-6	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-7	Test Date:	03/31/25	Checked By:	ank
Depth :	12-14	Test Id:	807470		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-7	SB-6	12-14	3	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

58% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-6	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-9	Test Date:	03/17/25	Checked By:	ank
Depth :	20-22	Test Id:	807471		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-9	SB-6	20-22	3	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

50% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: n/a
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-6	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-15	Test Date:	03/24/25	Checked By:	ank
Depth :	50-52	Test Id:	807472		
Test Comment:	---				
Visual Description:	Moist, brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-15	SB-6	50-52	13	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

71% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-7	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-3	Test Date:	03/17/25	Checked By:	ank
Depth :	4-6	Test Id:	807473		
Test Comment:	---				
Visual Description:	Moist, red sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-3	SB-7	4-6	6	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

47% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-7	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-9	Test Date:	03/21/25	Checked By:	ank
Depth :	20-22	Test Id:	807474		
Test Comment:	---				
Visual Description:	Moist, yellowish brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-9	SB-7	20-22	3	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

75% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-7	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-11	Test Date:	03/21/25	Checked By:	ank
Depth :	30-32	Test Id:	807475		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-11	SB-7	30-32	3	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

63% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-7	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-12	Test Date:	03/21/25	Checked By:	ank
Depth :	35-37	Test Id:	807476		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-12	SB-7	35-37	5	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

53% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: LOW

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-8	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-3	Test Date:	03/17/25	Checked By:	ank
Depth :	4-6	Test Id:	807477		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-3	SB-8	4-6	2	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

57% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: n/a
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-8	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-4	Test Date:	03/24/25	Checked By:	ank
Depth :	6-8	Test Id:	807508		
Test Comment:	---				
Visual Description:	Moist, light yellowish brown sand with silt and gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-4	SB-8	6-8	2	n/a	n/a	n/a	n/a	Poorly graded SAND with Silt and Gravel (SP-SM)

66% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: LOW

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-8	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-10	Test Date:	03/21/25	Checked By:	ank
Depth :	25-27	Test Id:	807509		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-10	SB-8	25-27	3	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

65% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-8	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-13	Test Date:	03/17/25	Checked By:	ank
Depth :	40-42	Test Id:	807510		
Test Comment:	---				
Visual Description:	Moist, very pale brown sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-13	SB-8	40-42	2	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

65% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-9	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-3	Test Date:	03/17/25	Checked By:	ank
Depth :	4-6	Test Id:	807511		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-3	SB-9	4-6	4	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

69% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-9	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-4	Test Date:	03/21/25	Checked By:	ank
Depth :	6-8	Test Id:	807512		
Test Comment:	---				
Visual Description:	Moist, light brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-4	SB-9	6-8	3	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

67% Retained on #40 Sieve
Dry Strength: LOW
Dilatancy: RAPID
Toughness: LOW
The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-9	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-8	Test Date:	03/17/25	Checked By:	ank
Depth :	14-16	Test Id:	807513		
Test Comment:	---				
Visual Description:	Moist, pale brown sand				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-8	SB-9	14-16	4	n/a	n/a	n/a	n/a	Poorly graded SAND (SP)

11% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: n/a

The sample was determined to be Non-Plastic

Client:	ARCADIS U.S., Inc.				
Project:	Town Islip Compost Facility				
Location:	---			Project No:	GTX-320703
Boring ID:	SB-9	Sample Type:	Bag	Tested By:	cam
Sample ID:	SS-14	Test Date:	03/21/25	Checked By:	ank
Depth :	45-47	Test Id:	807514		
Test Comment:	---				
Visual Description:	Moist, pale brown sand with gravel				
Sample Comment:	---				

Atterberg Limits - ASTM D4318

Sample Determined to be non-plastic

Symbol	Sample ID	Boring	Depth	Natural Moisture Content,%	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity Index	Soil Classification
◆	SS-14	SB-9	45-47	3	n/a	n/a	n/a	n/a	Poorly graded SAND with Gravel (SP)

64% Retained on #40 Sieve

Dry Strength: LOW

Dilatancy: RAPID

Toughness: LOW

The sample was determined to be Non-Plastic