WELTI GEOTECHNICAL, P.C.

227 Williams Street · P.O. Box 397
Glastonbury, CT 06033-0397

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July 19, 2024

Mr. Michael Oakes
Seabury Church Homes of Hartford, Inc
200- Seabury Drivc
Bloomfiedd, CT 06002

Re: Geotechnical Study for Proposed Phase B South Wing Addition at Seabury, Seabury Drive and Wintonbury Avenue, Bloomfield,CT

Dear Mr. Oakes

1.0 Herewith are the recent boring data pertaining to the above. Four borings (B-210 thru B-213) were drilled at the proposed building addition to a maximum depth of 20.5 feet below the existing grades. These borings supplement borings B-106 thru B-109, which were drilled in the proposed building addition area in 2020.The boring locations are shown on the attached plan. *The borings were drilled by Clarence Welti Associates, Inc. and sampling was conducted by this firm solely to obtain indications of subsurface conditions as part of a geotechnical exploration program. No services were performed to evaluate subsurface environmental conditions.*

2.0 The **Subject Project** will include the construction of Phase B South Wing Addition with a footprint of about 25,000 sf. It is presumed the proposed addition will have 2 to 3 stories with a slab on grade. The existing topography ranges from Elev.141 to Elev.143. The proposed finish slab on grade will be at Elev. 143.5.

3.0 The **Geologic Origin** of the natural inorganic soils is from glacial moraine deposits. These deposits consist generally of medium compact to dense fine to medium sand and silt with little gravel. The bedrock from geologic mapping is Portland Arkose (sandstone or siltstone).

3.1 The **Soils Cross Section** from the borings is generally as follows:

Topsoil to 4" to 8"; or Asphalt to 2.5" to 3" atop fine to coarse Sand and Gravel, little Silt to 12"

Locally FILL or disturbed soils; fine to medium SAND, some Silt, trace to little Gravel; or fine to coarse SAND, some Gravel, little Silt to 4 to 8 feet, loose to medium compact
Note: There may be deeper fills in areas around the existing building, at buried utilities and in

areas where former structures were located.

Locally Subsoil; fine to medium SAND, some Silt to 1.5 to 2 feet, loose frost disturbed soils

Fine to medium SAND and SILT, trace to little Gravel, few Cobbles to auger refusal on possible bedrock at 12.5 to 26+ feet, medium compact to very dense

3.2 The **Water Table** was not evident in the boreholes at the completion of the borings. The soils below about 8 feet had water contents close to saturation levels. The soils have a low permeability and low voids ratio. These properties allow the water table to temporarily mound where there is a concentrated storm water recharge.

4.0 The **Criteria for Foundation Type and Loading** are as follows:

1. The maximum total settlement should not exceed 3/4" and the maximum differential settlement should not exceed ½ the maximum settlement.

2. The Foundations and Structures must address the seismic section of the building code

3. The Slab at Grade floors should not settle differentially more than ½" in excess of the main structure subsidence.

4.1 Regarding item 2 (above), the seismic site soil profile classification can be **"C"**. The mapped MCE spectral response acceleration values for Bloomfield CT are $\mathbf{S_1 = 0.055}$ for one second period and $\mathbf{S_S = 0.182}$ for short period. For transfer of ground shear into the soil the ultimate friction factor can be **0.60.**

5.0 Regarding **Foundation Type,** the building addition can be supported on spread footings. The footings should be on the natural inorganic soils, or on a controlled fill placed after the removal of any existing fills, topsoil and frost disturbed subsoils (assumed frost disturbed to at least 2 feet below the existing grades). The soils may be susceptible to remolding under equipment when wet. To address this condition there should be a minimum 6" layer of 3/8" crushed stone beneath the footings on the natural soils and as an initial layer beneath controlled fills where atop a wet subgrade. Controlled fills should conform to section 6.0 below and should extend horizontally beyond the footings for a distance equal to at least the depth of fill beneath the footings.

5.1 The **Allowable Bearing Pressure** for spread footings on the crushed stone layer atop the natural soils at 5+ feet below the existing grades can be 8,000 psf. The **Allowable Bearing Pressure** for spread footings on controlled fill or at less then 5 feet below the existing grades can be 4,000 psf. The allowable loading can be increased by 1/3 for seismic or wind loading. At retaining walls the maximum pressure on the toe can be 50% higher than the average pressure, cited above.

5.2 The static **Lateral Soil Loading** on retaining walls that are part of the building should be based

on at-rest pressure using the coefficient $\mathbf{K_O = 0.45}$ as cited in the table below. Lateral soil loading on retaining walls apart from the building can be designed with active pressure using the coefficient $\mathbf{K_A = 0.28}$ for level backfill. The ultimate sliding coefficient for concrete cast on crushed stone or on controlled fill is **0.60.**

5.2.1 Seismic lateral soil loading for retaining walls that are part of the building should be with a total lateral force (seismic plus static at-rest pressure) equal to $24H^2$ lb/ft located at ½ H above the bottom. Any requirements for the seismic analyses of retaining wall structures should be determined from the Building Code section 1805.5 and ASCE-7 section 9.14. The above value is based on the Mononobe-Okabe solution for the case with level backfill, no wall friction and no hydrostatic pressure. This value excludes the inertia of the soil and wall mass.

5.3 The **Frost Protection Depth** is 3.5 feet below the finish grades in areas, which are exposed to weather.

5.4 Summary of Foundation Design Parameters:

Parameter	Value
Allowable Bearing Pressure on Controlled Fill or on Natural Inorganic Soils within 5 feet of existing grades	4,000 psf
Allowable Bearing Pressure on Natural Inorganic Soils at 5+ feet below the existing grades	8,000 psf
Soil Unit Weight (Backfill) *	125 pcf
Internal Friction Angle (Backfill) *	34°
At-Rest Pressure Coefficient, K_O	0.45
Active Pressure Coefficient, K_A (level backfill)	0.28
Ultimate Sliding Coefficient, concrete on crushed stone over soil	0.60
Seismic Site Soil Profile Classification	C
Mapped MCE Spectral Response Acceleration for one second period, S_1	0.055
Mapped MCE Spectral Response Acceleration for short period, S_S	0.182
Frost Protection Depth	3.5 feet

* Backfill material conforming to section 6.0 below

6.0 Regarding **Controlled Fill, Backfill for Retaining Walls and Excavations at Columns and Walls, plus Slab at Grade Underlayment** (to 4" below the slab bottom) the material should conform to the following or be 3/8" crushed stone:

Percent Passing	Sieve Size
100	3.5"
50 - 100	3/4"
25 - 75	No.4

The fraction, passing the No.4 sieve should have less than 15%, passing the No. 200 sieve.

The on-site excavated soils will not conform to the above gradation.

All backfill and fill must be compacted to at least 95% of modified optimum density.

6.1 All topsoil and subsoils should be removed beneath the floor slab. There should be a minimum 16" of controlled fill beneath slab on grade floors, placed to within 4" of the slab bottom. The final 4" beneath slab on grade floors should be with 3/8" crushed stone or processed stone base. The controlled fill should conform to section 6.0 above. A vapor retarder is required beneath the slab at grade floors.

6.1.1 Where floor slabs are below the finished exterior grades there should be (1) a minimum 8" layer of 3/8" crushed stone beneath the floor slabs, (2) perimeter foundation drains, (3) interior drains placed about 6 feet inside the building and (4) water stops at the wall/footing interface. The requirements for drainage should be reviewed when a final grading plan and floor elevations are available.

7.0 Regarding **Earthwork,** excavations in the natural soils will fall in OSHA Class C. This will require sloping of excavations, which are unshored and exceed 5 feet in height, to be cut back to slopes less than 34° from the horizontal (1.5H:1V).

8.0 Regarding **New Pavements,** the soils at sub grade are frost susceptible. There should be at least 10" of gravel subbase conforming to section 6.0 above beneath the pavement sections. The topsoil and frost disturbed subsoils should be removed beneath new pavement. If the sub grades are wet there may be a requirement for an initial layer of crushed stone, in lieu of or in addition to the subbase, to provide stability for equipment. The recommended pavement sections above the subbase layer are as follows:

1. Passenger Car Parking: 3" of bituminous concrete on 6" of processed stone base

2. Truck Access: 4" of bituminous concrete on 8" of processed stone base

8.1 For **Portland Cement Concrete** the concrete thickness for light truck traffic would be 6". This would be placed on 12" of Gravel Subbase. For passenger car parking the concrete thickness would be 5" atop 12" of Gravel Subbase. ***For concrete aprons contiguous to the building the gravel subbase should extend to 18" below grade. This is to avoid movement of the slab at flush doorways.*** The modulus of subgrade reaction may be taken as 200 pci.

9.0 This report has been prepared for specific application to the subject project in accordance with generally accepted soil and foundation engineering practices. No other warranty, express or implied, is made. In the event that any changes in the nature, design and location of structures are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing.

The analyses and recommendations submitted in this report are based in part upon data obtained from referenced explorations. The extent of variations between explorations may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations of this report.

Welti Geotechnical, P.C., should perform a general review of the final design and specifications in order that geotechnical design recommendations may be properly interpreted and implemented as they were intended.

If you have any questions, please call our office.

Very truly yours,

Max Welti

Max Welti, P.E.
President Welti Geotechnical, P.C.

Clarence Welti

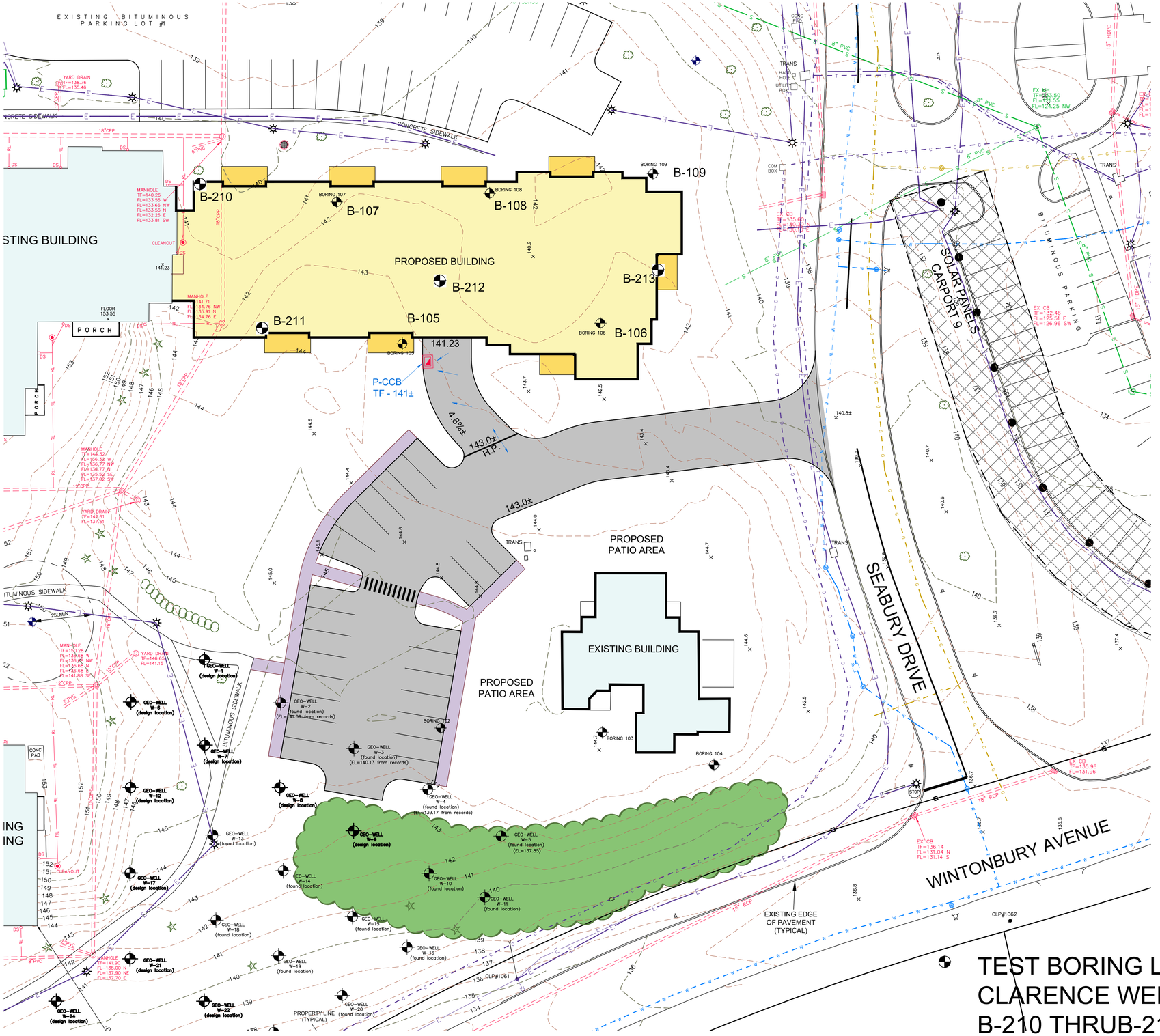
Clarence Welti Ph.D., P. E.

APPENDIX

Boring Location Plan

Boring Data

Laboratory Test Results



TEST BORING LOCATIONS
CLARENCE WELTI ASSOCIATES, INC.
B-210 THRUB-213 TAKEN 6/19/24
B-105 THRU B-109 TAKEN 1/7/20

CLARENCE WELTI ASSOC., INC.
P.O. BOX 397
GLASTONBURY, CONN 06033

CLIENT
SEABURY

PROJECT NAME
PROPOSED SOUTH WING ADDITION
LOCATION
200 SEABURY DRIVE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV.
HOLE NO. B-210

GROUND WATER OBSERVATIONS
AT none FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 6/19/24
FINISH DATE 6/19/24

DEPTH	SAMPLE NO.	BLOWS/6"	DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0	1	5-17-15-15	0.0'-2.0'		BR.FINE-MED.SAND AND SILT, LITTLE GRAVEL	
	2	28-60	2.0'-3.0'			
	3	9-12-14-20	4.0'-6.0'			
5						
10	4	14-16-21	10.0'-11.5'			
15	5	12-20-24	15.0'-16.5'			
20	6	60	20.0'-20.5'		BOTTOM OF BORING @ 20.5 — 20.5	
25						
30						
35						

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: J. TURGEON
INSPECTOR:

SHEET 1 OF 1 | HOLE NO. **B-210**

CLARENCE WELTI ASSOC., INC.
P.O. BOX 397
GLASTONBURY, CONN 06033

CLIENT
SEABURY

PROJECT NAME
PROPOSED SOUTH WING ADDITION
LOCATION
200 SEABURY DRIVE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV.
HOLE NO. B-211

GROUND WATER OBSERVATIONS
AT none FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 6/19/24
FINISH DATE 6/19/24

DEPTH	SAMPLE NO.	SAMPLE BLOWS/6"	SAMPLE DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0	1	5-16-20-20	0.0'-2.0'		TOPSOIL 0.33	
					BR.FINE-MED.SAND AND SILT, LITTLE GRAVEL	
	2	12-18-20-26	2.0'-4.0'			
	3	22-21-30-30	4.0'-6.0'			
5						
10	4	19-30-60	10.0'-11.2'			
					BOTTOM OF BORING @ 14.0' (AUGER REFUSAL) 14.0	
15						
20						
25						
30						
35						

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: J. TURGEON
INSPECTOR:

SHEET 1 OF 1 | HOLE NO. **B-211**

CLARENCE WELTI ASSOC., INC.
P.O. BOX 397
GLASTONBURY, CONN 06033

CLIENT
SEABURY

PROJECT NAME
PROPOSED SOUTH WING ADDITION
LOCATION
200 SEABURY DRIVE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV.
HOLE NO. B-212

GROUND WATER OBSERVATIONS
AT none FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 6/19/24
FINISH DATE 6/19/24

DEPTH	SAMPLE NO.	BLOWS/6"	DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0	1	9-11-14-20	0.0'-2.0'		TOPSOIL 0.33	
					LIGHT BR.FINE SAND, TRACE SILT	
	2	12-15-14-20	2.0'-4.0'		2.0	
					BR.FINE-MED.SAND AND SILT, LITTLE GRAVEL	
	3	17-26-22-25	4.0'-6.0'			
5						
10	4	14-20-21	10.0'-11.5'		12.5	
					BOTTOM OF BORING @ 12.5' (AUGER REFUSAL)	
15						
20						
25						
30						
35						

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: J. TURGEON
INSPECTOR:

SHEET 1 OF 1 | HOLE NO. **B-212**

CLARENCE WELTI ASSOC., INC.
P.O. BOX 397
GLASTONBURY, CONN 06033

CLIENT
SEABURY

PROJECT NAME
PROPOSED SOUTH WING ADDITION
LOCATION
200 SEABURY DRIVE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV.
HOLE NO. B-213

GROUND WATER OBSERVATIONS
AT none FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 6/19/24
FINISH DATE 6/19/24

DEPTH	SAMPLE NO.	BLOWS/6"	DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0	1	8-14-17-17	0.0'-2.0'		TOPSOIL 0.33	
					BR.FINE-MED.SAND AND SILT, TRACE GRAVEL - FILL	
	2	13-17-14-15	2.0'-4.0'			
					3.7	
	3	28-17-18-18	4.0'-6.0'		BR.FINE SAND, TRACE SILT & GRAVEL 4.0	
5					BR.FINE-MED.SAND AND SILT, LITTLE GRAVEL	
	4	10-13-20-23	6.0'-8.0'			
10	5	11-60	10.0'-11.0'			
					11.5	
					BOTTOM OF BORING @ 11.5' (AUGER REFUSAL)	
15						
20						
25						
30						
35						

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: J. TURGEON
INSPECTOR:

SHEET 1 OF 1 | HOLE NO. **B-213**

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033	CLIENT SEABURY	PROJECT NAME PROPOSED HYBRID VILLAS LOCATION SEABURY DRIVE & WINTONBURY AVENUE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV.
HOLE NO. B-105

GROUND WATER OBSERVATIONS
AT none FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 1/7/20
FINISH DATE 1/7/20

DEPTH	SAMPLE NO.	BLOWS/6"	DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0					ASPHALT 0.20	
	1	4-5-8-10	1.0'-3.0'		BR.FINE-CRS.SAND, SOME GRAVEL, LITTLE SILT - FILL 1.0	
					RED/BR.FINE-CRS.SAND AND SILT, LITTLE GRAVEL	
	2	8-9-14-14	3.0'-5.0'			
5	3	7-12-16-18	5.0'-7.0'			
10	4	12-17-22	10.0'-11.5'			
15	5	8-12-16	15.0'-16.5'			
20	6	7-14-18	20.0'-21.5'			
25	7	8-12-20	25.0'-26.5'			
					BOTTOM OF BORING @ 26.5' 26.5	
30						
35						

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: J. BREWER
INSPECTOR:

SHEET 1 OF 1 | HOLE NO. B-105

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033	CLIENT SEABURY	PROJECT NAME PROPOSED HYBRID VILLAS LOCATION SEABURY DRIVE & WINTONBURY AVENUE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV.

HOLE NO. B-106

GROUND WATER OBSERVATIONS
AT none FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 1/7/20
FINISH DATE 1/7/20

DEPTH	SAMPLE NO.	BLOWS/6"	DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0					ASPHALT 0.25	
	1	5-7-8-8	1.0'-3.0'		BR.FINE-CRS.SAND, SOME GRAVEL, LITTLE SILT - FILL 1.0	
					RED/BR.FINE-CRS.SAND AND SILT, LITTLE GRAVEL	
	2	11-12-16-14	3.0'-5.0'			
5	3	7-9-9-11	5.0'-7.0'			
10	4	20-29-38	10.0'-11.5'			
15	5	15-19-21	15.0'-16.5'			
20	6	10-16-21	20.0'-21.5'			
25	7	12-20-24	25.0'-26.5'			
					BOTTOM OF BORING @ 26.5' 26.5	
30						
35						

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: J. BREWER
INSPECTOR:

SHEET 1 OF 1 HOLE NO. B-106

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033	CLIENT SEABURY	PROJECT NAME PROPOSED HYBRID VILLAS LOCATION SEABURY DRIVE & WINTONBURY AVENUE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV.

HOLE NO. B-107

GROUND WATER OBSERVATIONS
AT none FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 1/7/20
FINISH DATE 1/7/20

DEPTH	SAMPLE NO.	SAMPLE BLOWS/6"	SAMPLE DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0	1	4-7-7-12	0.0'-2.0'		TOPSOIL — 0.60	
					BR.FINE SAND AND SILT — 1.5	
	2	12-21-12-23	2.0'-4.0'		RED/BR.FINE-CRS.SAND AND SILT, LITTLE GRAVEL	
5	3	9-11-13	5.0'-7.0'			
10	4	10-12-21	10.0'-11.5'			
15					BOTTOM OF BORING @ 14.0' (AUGER REFUSAL) — 14.0	
20						
25						
30						
35						

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: J. BREWER
INSPECTOR:

SHEET 1 OF 1 | HOLE NO. B-107

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033	CLIENT SEABURY	PROJECT NAME PROPOSED HYBRID VILLAS LOCATION SEABURY DRIVE & WINTONBURY AVENUE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV
HOLE NO. B-108

GROUND WATER OBSERVATIONS
AT none FT AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 1/7/20
FINISH DATE 1/7/20

DEPTH	SAMPLE NO.	SAMPLE BLOWS/6"	SAMPLE DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0	1	7-9-8-8	0.0'-2.0'		TOPSOIL 0.40	
					LIGHT BR.FINE SAND, LITTLE SILT - POSSIBLE FILL	
	2	11-11-16-21	2.0'-4.0'			
					BR.FINE-CRS.SAND, SOME GRAVEL, LITTLE SILT - POSSIBLE FILL 3.5	
	3	6-6-9-13	4.0'-6.0'			
5					RED/BR.FINE-CRS.SAND AND SILT, LITTLE GRAVEL 5.5	
10	4	8-11-17	10.0'-11.5'			
					BOTTOM OF BORING @ 12.0' (AUGER REFUSAL) 12.0	
15						
20						
25						
30						
35						

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: J. BREWER
INSPECTOR

SHEET 1 OF 1 | HOLE NO. B-108

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033	CLIENT SEABURY	PROJECT NAME PROPOSED HYBRID VILLAS LOCATION SEABURY DRIVE & WINTONBURY AVENUE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV
HOLE NO. B-109

GROUND WATER OBSERVATIONS
AT none FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 1/7/20
FINISH DATE 1/7/20

DEPTH	SAMPLE NO.	SAMPLE BLOWS/6"	SAMPLE DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0	1	7-9-11-10	0.0'-2.0'		TOPSOIL	
					BR.FINE-MED.SAND, SOME SILT, LITTLE GRAVEL - FILL	0.75
	2	27-21-12-9	2.0'-4.0'			
	3	2-4-8-10	4.0'-6.0'			
5					BR.FINE-MED.SAND, SOME SILT, TRACE GRAVEL - FILL	5.0
					RED/BR.FINE-CRS.SAND AND SILT, LITTLE GRAVEL	8.0
10	4	7-10-14	10.0'-11.5'			
15	5	10-16-22	15.0'-16.5'			
20	6	6-14-19	20.0'-21.5'			
25	7	8-12-17	25.0'-26.5'			
					BOTTOM OF BORING @ 26.5'	26.5
30						
35						

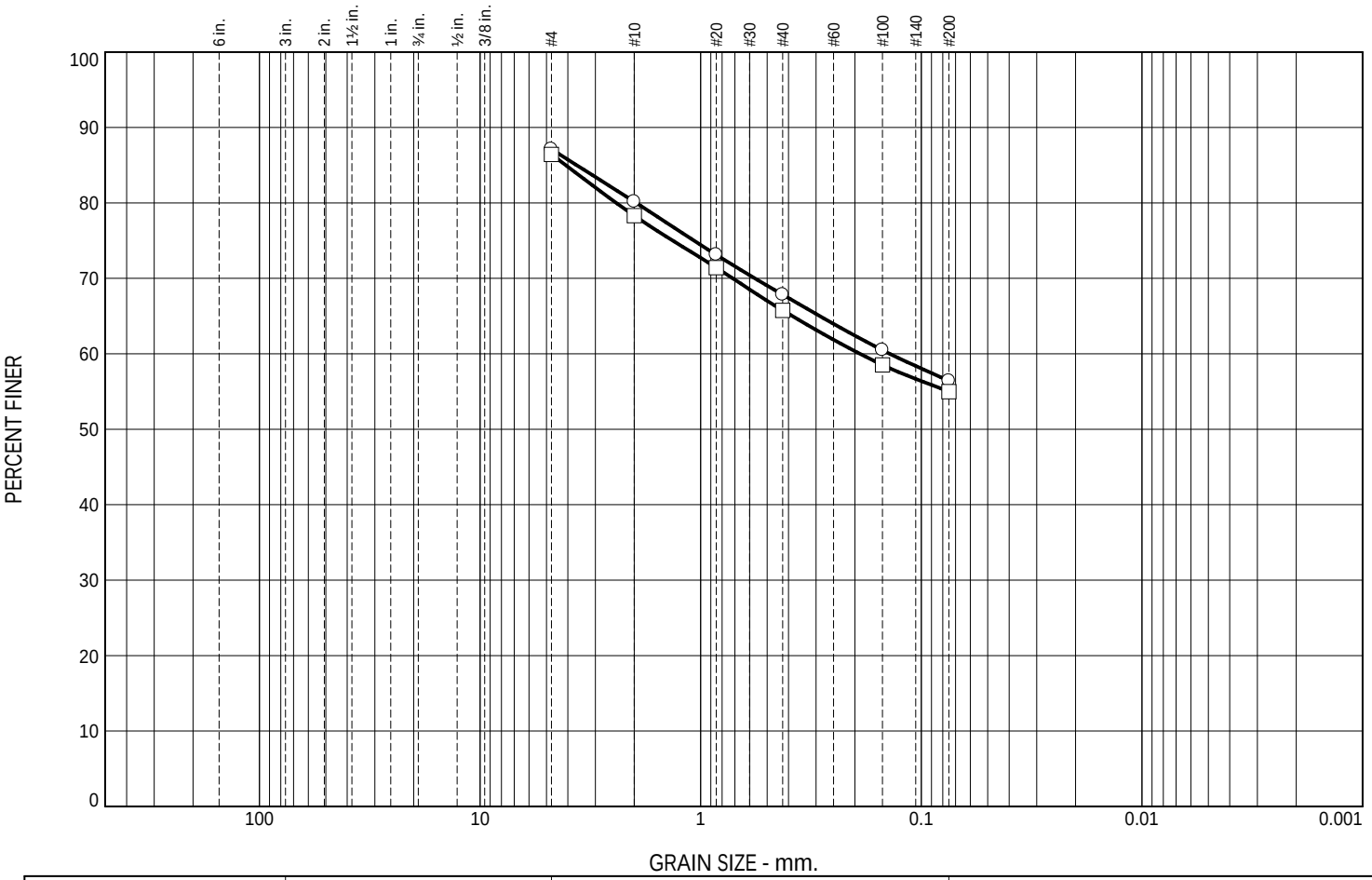
LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: J. BREWER
INSPECTOR:

SHEET 1 OF 1 | HOLE NO. B-109

Particle Size Distribution Report

ASTM D422



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○				6.9	12.4	11.4	56.4	
□				8.1	12.5	10.8	55.0	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			3.6475	0.1391						
□			4.0868	0.1896						

Material Description	Test Date	USCS	NM
○ water content = 9.5% □ water content = 8.7%			

Project No. Client: SEABURY

Project: PROPOSED SOUTH WING ADDITION

○Source of Sample: B-210 Depth: 4.0 Sample Number: 3

□Source of Sample: B-212 Depth: 4.0 Sample Number: 3

Remarks:

CLARENCE WELTI ASSOCIATES, INC.

Figure