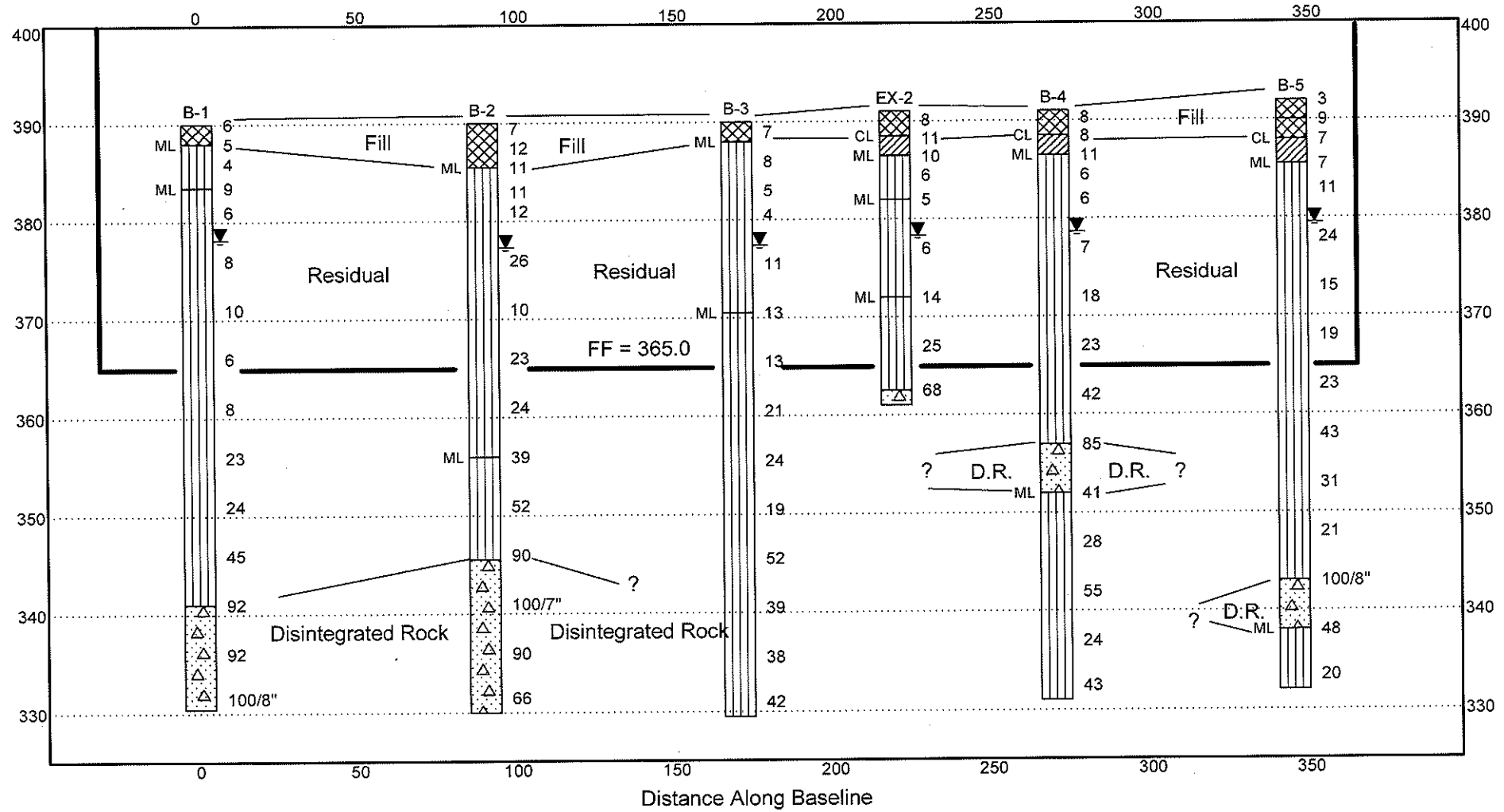


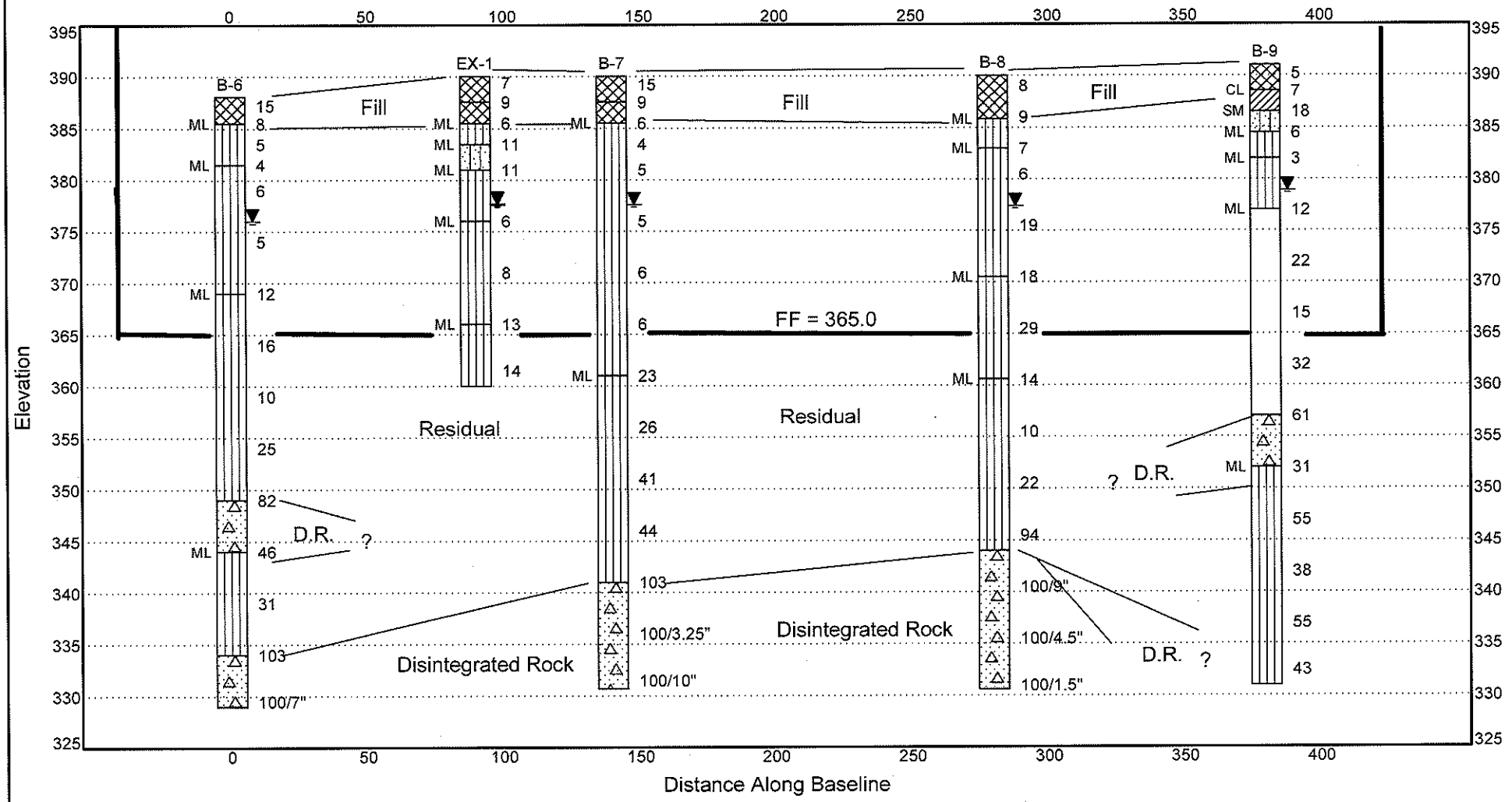
D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

SUBSURFACE PROFILE
Section A-A'

444 Maple Avenue

Contract No.	Date	Drawing No.
14107.D	Aug 14	1

ABC 14107.GPJ KOZERA.GDT 8/19/14



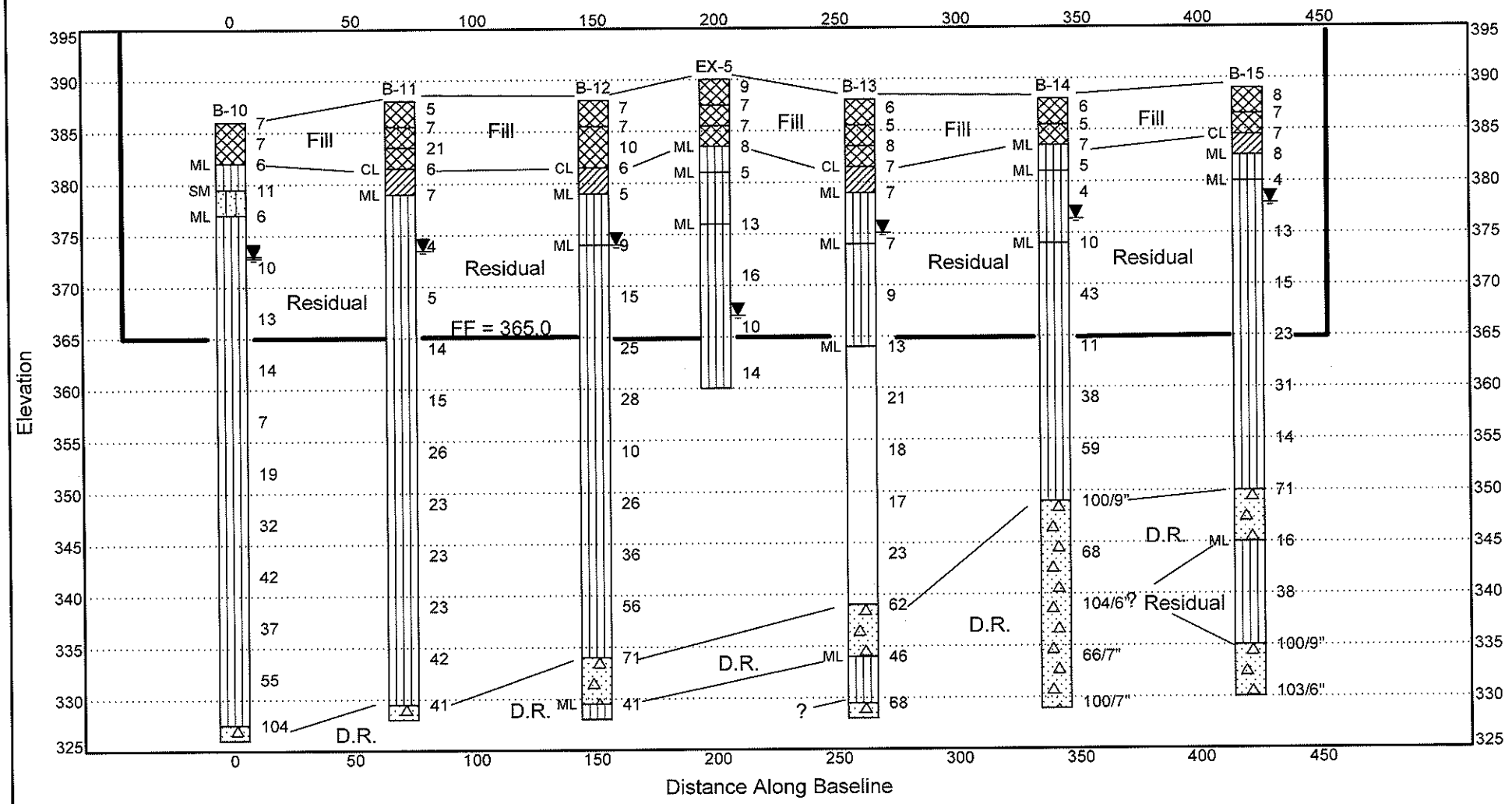
D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

SUBSURFACE PROFILE
Section B-B'

444 Maple Avenue

Contract No.	Date	Drawing No.
14107.D	Aug 14	1

ABC 14107.GPJ KOZERA.GDT 8/25/14



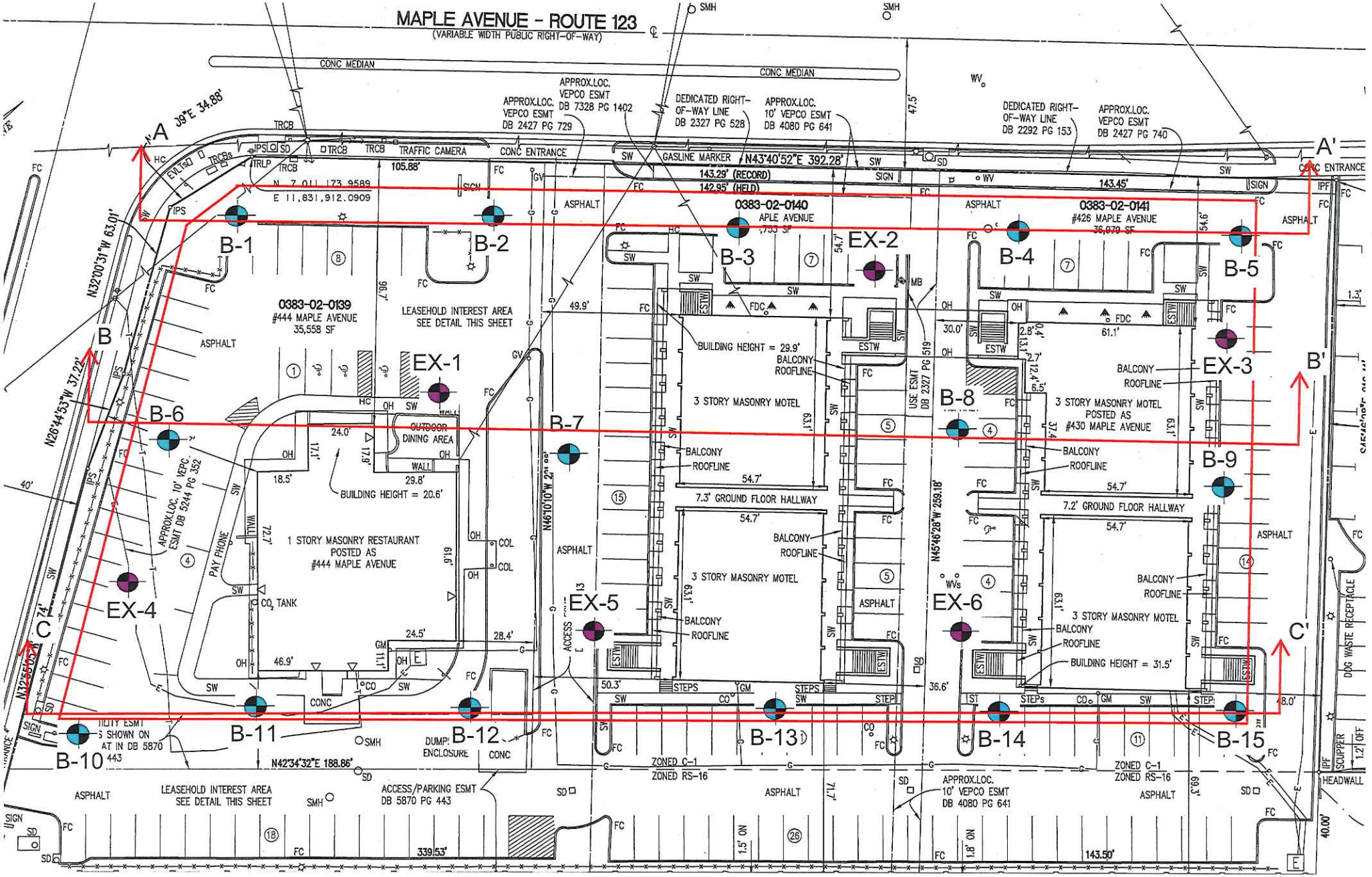
D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

SUBSURFACE PROFILE
Section C-C'

444 Maple Avenue

Contract No.	Date	Drawing No.
14107.D	Aug 14	1

ABC 14107.GPJ KOZERA.GDT 8/25/14


MAPLE AVENUE - ROUTE 123
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)
CONC MEDIAN
CONC MEDIAN
APPROX.LOC. VEPCO ESMT DB 2427 PG 729
APPROX.LOC. VEPCO ESMT DB 7328 PG 1402
DEDICATED RIGHT-OF-WAY LINE DB 2327 PG 528
APPROX.LOC. 10' VEPCO ESMT DB 4080 PG 641
DEDICATED RIGHT-OF-WAY LINE DB 2292 PG 153
APPROX.LOC. VEPCO ESMT DB 2427 PG 740
TRAFFIC CAMERA
CONC ENTRANCE
GASLINE MARKER
N43°40'52"E 392.28'
143.29' (RECORD)
142.95' (HELD)
143.45'
N 7 011 173.9589
E 11,831,912.0909
105.88'
0383-02-0139
#444 MAPLE AVENUE
35,558 SF
0383-02-0140
APLE AVENUE
0383-02-0141
#426 MAPLE AVENUE
36,979 SF
LEASEHOLD INTEREST AREA
SEE DETAIL THIS SHEET
ASPHALT
BUILDING HEIGHT = 29.9'
BALCONY
ROOFLINE
3 STORY MASONRY MOTEL
3 STORY MASONRY MOTEL
POSTED AS
#430 MAPLE AVENUE
7.3' GROUND FLOOR HALLWAY
7.2' GROUND FLOOR HALLWAY
OUTDOOR
DINING AREA
BUILDING HEIGHT = 20.6'
1 STORY MASONRY RESTAURANT
POSTED AS
#444 MAPLE AVENUE
BUILDING HEIGHT = 31.5'
USE ESMT DB 2327 PG 519
APPROX.LOC. 10' VEPCO ESMT DB 5244 PG 352
ACCESS/PARKING ESMT DB 5870 PG 443
APPROX.LOC. 10' VEPCO ESMT DB 4080 PG 641
ZONED C-1
ZONED RS-16
B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
B-9
B-10
B-11
B-12
B-13
B-14
B-15
EX-1
EX-2
EX-3
EX-4
EX-5
EX-6
A
A'
B
B'
C
C'
N32°00'31"W 63.01'
N26°44'53"W 37.22'
N32°56'03"W 74'
N46°10'10"W 2**'
N45°46'28"W 259.18'
N42°34'32"E 188.86'
339.53'
143.50'
DOG WASTE RECEPTACLE
HEADWALL
SCUPPER

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-1
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location:
Vienna, Virginia

Ground Surf. El. (±) : 390.0
Date Started : 8-1-14
Date Completed : 8-1-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS					
	Date	Time	Depth	Casing	Caved
Encountered	8-1	08:20	26.6	29.0	---
Completion	8-1	09:40	36.7	36.7	---
Casing Pulled	8-1	10:25	12.7	48.0	39.1
	8-5	01:55	11.9	48.0	---
	8-6	08:05	12.1	48.0	---

Depth (ft)	Surf. Elev. 390.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	3-3-3	6				sandy silt, FILL, rock fragments, roots, moist, brown	Fill	A	Topsoili = 0.2'
		2	3-2-3	5				SILT with sand, moist, light brown-brown		B	
5	385	3	1-2-2	4			ML	contains trace roots @ 2.0'			Temporary Standpipe set to a depth of 48' after completion of drilling
		4	3-4-5	9				SANDY SILT, moist, brown			
10	380	5	2-3-3	6	▼						
15	375	6	3-3-5	8							
20	370	7	4-4-6	10							
25	365	8	3-3-3	6	▽			contains trace quartz fragments @ 24.0'	Residual		
30	360	9	3-4-4	8			ML				
35	355	10	6-10-13	23							
40	350	11	8-10-14	24							
45	345	12	14-23-22	45							
50	340	13	18-35-57	92				DISINTEGRATED ROCK, moist, brown	Disintegrated Rock	C	
55	335	14	17-32-60	92							
		15	25-64-36/1.5	100/8"				Bottom of Test Boring @ 59.6'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/19/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-2
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 390.0
Date Started : 8-4-14
Date Completed : 8-4-14
Contractor : GeoServices, Corp., Inc
Driller : R. Stidham
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

	GROUNDWATER OBSERVATIONS				
	Date	Time	Depth	Casing	Caved
Encountered	8-4	07:40	32.8	34.0	---
Completion	8-4	08:30	53.1	58.5	---
Casing Pulled	8-4	09:05	13.8	---	47.0
	8-5	06:40	12.7	---	32.0

Depth (ft)	Surf. Elev. 390.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	5-3-4	7				sandy silt, FILL, moist, brown	Fill	A	Blacktop = 4" Gravel Base = 0.5'
		2	6-5-7	12							
5	385	3	4-5-6	11				SILT with sand, moist, brown	Residual	B	
		4	4-5-6	11							
10	380	5	4-5-7	12	▼						
15	375	6	5-9-17	26							
20	370	7	3-4-6	10			ML				
25	365	8	5-10-13	23							
30	360	9	3-7-17	24	▽			trace quartz @ 30.4'			
35	355	10	12-17-22	39				SANDY SILT, moist, brown			
40	350	11	12-22-30	52			ML				
45	345	12	25-38-52	90				DISINTEGRATED ROCK, moist, brown	Disintegrated Rock	C	
50	340	13	25-65-35/.5	100/7"							
55	335	14	25-41-49	90							
60	330	15	12-28-38	66							
								Bottom of Test Boring @ 60.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/19/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-3
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location:
Vienna, Virginia

Ground Surf. El. (±) : 390.0
Date Started : 8-4-14
Date Completed : 8-4-14
Contractor : GeoServices, Corp., Inc
Driller : R. Stidham
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS					
	Date	Time	Depth	Casing	Caved
Encountered	8-4	12:35	34.0	34.5	---
Completion	8-4	13:15	43.3	59.0	---
Casing Pulled	8-4	13:45	14.3	---	52.0
	8-5	06:55	12.6	---	19.7

Depth (ft)	Surf. Elev. 390.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	4-3-4	7				silt, FILL, moist, brown	Fill	A	Blacktop = 9" Gravel Base = 6"
								SILT, with sand, moist, brown		B	
5	385	2	3-4-4	8							
		3	2-2-3	5				redish brown @ 7.0'			
10	380	4	1-2-2	4	▼		ML				
15	375	5	3-5-6	11				trace quartz @ 14.5'			
20	370	6	3-5-8	13				SILT, trace sand, moist, brown	Residual		
25	365	7	4-7-6	13							
30	360	8	5-8-13	21							
35	355	9	4-8-16	24	▽			white layers, wet			
40	350	10	5-8-11	19			ML				
45	345	11	11-16-36	52							
50	340	12	19-15-24	39							
55	335	13	11-17-21	38							
60	330	14	13-18-24	42				Bottom of Test Boring @ 60.5'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/26/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-4
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 391.0
Date Started : 8-5-14
Date Completed : 8-5-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-5	09:10	47.6	49.0	---
Completion	8-5	09:40	39.2	58.5	---
Casing Pulled	8-5	10:10	17.4	None	24.0
	8-6	06:40	12.4	None	31.5

Depth (ft)	Surf. Elev. 391.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	4-4-4	8				silt with sand, silty sand, FILL, rock fragments, moist, brown	Fill	A	Asphalt = 0.7'
		2	4-4-4	8			CL	LEAN CLAY, trace sand, moist, brown	Residual	B	
5	385	3	2-5-6	11				SANDY SILT, moist, brown contains rock fragments @ 4.5'			
		4	2-3-3	6							
10	380	5	2-2-4	6	▼			trace roots @ 9.0'			
15	375	6	2-3-4	7							
20	370	7	5-8-10	18			ML				
25	365	8	4-9-14	23							
30	360	9	9-17-25	42							
35	355	10	16-33-52	85				DISINTEGRATED ROCK, moist, brown	Disintegrated Rock	C	
40	350	11	12-17-24	41				SANDY SILT, moist, light brown-brown	Residual	B	
45	345	12	7-13-15	28	▽			moist, brown @ 44.0'			
50	340	13	19-26-29	55			ML				
55	335	14	9-10-14	24							
60		15	15-17-26	43				Bottom of Test Boring @ 60.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/19/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-5
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 392.0
Date Started : 7-31-14
Date Completed : 7-31-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	7-31	01:10	---	---	---
Completion	7-31	01:15	None	58.5	---
Casing Pulled	7-31	02:05	29.7	None	38.4
	8-1	07:00	12.8	45.0	---
	8-6	08:13	12.5	45.0	---

Depth (ft)	Surf. Elev. 392.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	1-1-2	3				sandy silt, FILL, plastic, moist, brown	Fill	A	Topsoil = 0.3'
	390	2	3-4-5	9				silty sand, FILL, trace rock fragments, moist, brown			1/4" PVC, 15' Screen
5		3	2-3-4	7			CL	SANDY LEAN CLAY, moist, brown		B	
	385	4	3-3-4	7				SANDY SILT, moist, brown contains trace rock fragments @ 6.5'			
10		5	2-5-6	11	▼						Temporary standpipe set to a depth of 45 feet after completion of drilling
	380										
15		6	7-11-13	24							
	375										
20		7	5-6-9	15							
	370										
25		8	5-8-11	19					Residual		
	365						ML				
30		9	4-9-14	23							
	360										
35		10	12-18-25	43							
	355										
40		11	7-13-18	31							
	350										
45		12	8-9-12	21							
	345										
50		13	26-76-24/2"	100/8"				DISINTEGRATED ROCK, moist, light brown-brown, contains rock fragments	*	C	* Disintegrated Rock
	340										
55		14	17-25-23	48				SANDY SILT, moist, brown	*	B	* Residual
	335						ML				
60		15	7-10-10	20				Bottom of Test Boring @ 60.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/19/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-6
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 388.0
Date Started : 8-6-14
Date Completed : 8-6-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-6	09:25	21.2	29.0	---
Completion	8-6	10:35	57.2	58.5	---
Casing Pulled	8-6	11:05	13.5	None	22.1
	8-7	06:50	12.0	None	23.4

Depth (ft)	Surf. Elev. 388.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	2-7-8	15				sandy lean clay, silty sand, rock fragments, FILL, moist, brown	Fill	A	Asphalt = 0.7
	385	2	3-4-4	8			ML	SANDY SILT, moist, brown	Residual	B	
5		3	3-2-3	5				contains trace quartz fragments @ 4.5'			
	380	4	3-2-2	4				SILT with sand, moist, brown			
10		5	2-3-3	6	▼		ML				
	375										
15		6	2-2-3	5							
	370										
20		7	4-5-7	12	▽			SANDY SILT, moist, brown			
	365										
25		8	3-7-9	16							
	360										
30		9	3-4-6	10			ML				
	355										
35		10	6-11-14	25							
	350										
40		11	17-34-48	82		△ △ △ △		DISINTEGRATED ROCK, moist, brown	*	C	* Disintegrated Rock
	345										
45		12	16-22-24	46				SANDY SILT, moist, brown	Residual	B	
	340										
50		13	9-14-17	31			ML				
	335										
55		14	20-27-76	103		△ △ △ △		DISINTEGRATED ROCK, moist, brown	*	C	* Disintegrated Rock
	330	15	74-26/.5"	100/7"				Bottom of Test Boring @ 59.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/18/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-7
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 390.0
Date Started : 8-8-14
Date Completed : 8-8-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MadLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-8	12:20	43.1	44.0	---
Completion	8-8	13:10	23.9	58.5	---
Casing Pulled	8-8	13:45	17.8	None	18.2
	8-11	07:10	12.4	None	13.2

Depth (ft)	Surf. Elev. 390.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	7-8-7	15				sandy lean clay, silty sand, rock fragments, FILL, moist, gray, brown	Fill	A	Asphalt = 0.7'
		2	3-4-5	9				lean clay with sand, trace gravel and organic matter, FILL, moist, brown			
5	385	3	3-3-3	6				SILT with sand, moist, brown		B	
		4	1-2-2	4							
10	380	5	2-2-3	5	▼						
15	375	6	2-2-3	5			ML		Residual		
20	370	7	2-3-3	6							
25	365	8	2-3-3	6							
30	360	9	5-10-13	23				SANDY SILT, moist, brown			
35	355	10	7-12-14	26							
40	350	11	11-18-23	41			ML				
45	345	12	12-19-25	44	▽						
50	340	13	24-103	103				DISINTEGRATED ROCK, moist, brown	Disintegrated Rock	C	
55	335	14	100/3.25"	00/3.25"							
		15	32-68/4"	100/10"				Bottom of Test Boring @ 59.3'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/26/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-8
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) :
Date Started : 8-4-14
Date Completed : 8-4-14
Contractor : GeoServices, Corp., Inc
Driller : R. Stidham
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-4	10:10	29.7	34.5	---
Completion	8-4	11:00	19.9	59.0	---
Casing Pulled	8-4	11:50	17.2	---	48.0
	8-5	12:45	12.6	---	39.9

Depth (ft)	Surf. Elev.	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	3-4-4	8				silt, FILL, moist, gray brown	Fill	A	Blacktop = 9.0" Gravel Base = 3.0"
5		2	3-4-5	9			ML	SILT, with sand, moist, brown	Residual	B	
		3	3-3-4	7				SANDY SILT, trace quartz, moist, redish brown			
10		4	2-3-3	6	▼			silt layer			
							ML				
15		5	4-7-12	19							
20		6	4-7-11	18				SILT with sand, moist, brown			
25		7	7-11-18	29			ML				
30		8	4-6-8	14	▽			SANDY SILT, trace quartz, moist, redish brown			
35		9	3-4-6	10				brown @ 34.5'			
							ML				
40		10	5-9-13	22				wet @ 39.5'			
45		11	16-29-65	94				DISINTEGERATED ROCK, moist, brown	Disintegrated Rock	C	
50		12	50-50/3"	100/9"							
55		13	100/4.5"	100/4.5"							
		14	100/1.5"	100/1.5"				Bottom of Test Boring @ 59.4'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/19/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-9
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 391.0
Date Started : 8-6-14
Date Completed : 8-6-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-6	12:40	33.4	39.0	---
Completion	8-6	13:35	26.6	58.5	---
Casing Pulled	8-6	14:10	15.3	None	30.4
	8-7	06:40	12.1	None	33.1

Depth (ft)	Surf. Elev. 391.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	3-2-3	5				sandy silt, FILL, moist, brown	Fill	A	Asphalt = 0.7'
		2	3-3-4	7			CL	SANDY LEAN CLAY, moist, brown	Residual	B	
5	385	3	3-7-11	18			SM	SILTY SAND, moist, brown, contains quartz fragments			
		4	3-3-3	6			ML	SANDY SILT, moist, brown, light brown			
10	380	5	1-1-2	3	▼		ML	SILT with sand, moist, light brown			
15	375	6	5-6-6	12				SANDY SILT, moist, brown			
20	370	7	6-9-13	22							
25	365	8	5-7-8	15			ML				
30	360	9	7-11-21	32	▽						
35	355	10	12-26-35	61				DISINTEGRATED ROCK, moist, brown	*	C	* Disintegrated Rock
40	350	11	6-13-18	31				SANDY SILT, moist, brown	Residual	B	
45	345	12	12-23-32	55							
50	340	13	10-17-21	38			ML				
55	335	14	16-25-30	55							
60		15	10-18-25	43				Bottom of Test Boring @ 60.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/26/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-10
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location:
Vienna, Virginia

Ground Surf. El. (±) : 386.0
Date Started : 7-31-14
Date Completed : 7-31-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS					
	Date	Time	Depth	Casing	Caved
Encountered	7-31	08:55	27.6	29.0	---
Completion	7-31	10:05	47.7	58.5	---
Casing Pulled	7-31	10:55	14.6	45.0	---
	8-1	07:05	13.0	45.0	---
	8-6	08:08	13.2	45.0	---

Depth (ft)	Surf. Elev. 386.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	385	1	3-4-3	7				silty sand, FILL, rock fragmetns, moist, brown	Fill	A	Topsoil = 0.1'
		2	2-2-5	7							
5	380	3	3-3-3	6			ML	SANDY SILT, moist, brown		B	
		4	4-4-7	11			SM	SILTY SAND, moist, brown			Temporary standpipe set to a depth of 45 feet after completion of drilling.
10	375	5	3-3-3	6				SANDY SILT, moist, brown			
					▼						
15	370	6	2-4-6	10							
20	365	7	3-5-8	13							
25	360	8	2-6-8	14							
					▽						
30	355	9	2-3-4	7							
35	350	10	4-8-11	19			ML				
40	345	11	7-13-19	32							
45	340	12	9-18-24	42							
50	335	13	9-15-22	37							
55	330	14	21-27-28	55							
60		15	21-38-66	104		△		DISINTEGRATED ROCK, moist, brown	*	C	* Disintegrated Rock
								Bottom of Test Boring @ 60.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/19/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-11
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

	GROUNDWATER OBSERVATIONS				
	Date	Time	Depth	Casing	Caved
Encountered	8-7	12:20	25.9	29.0	---
Completion	8-7	13:25	52.8	58.5	---
Casing Pulled	8-7	14:00	17.1	None	40.4
	8-8	06:35	14.5	None	14.8

Ground Surf. El. (±) : 388.0
Date Started : 8-7-14
Date Completed : 8-7-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

Depth (ft)	Surf. Elev. 388.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	3-2-3	5				sandy silt, trace gravel, FILL, moist, brown		A	
	385	2	3-3-4	7				sandy silt, trace gravel, contains roots, FILL, moist, brown	Fill		
5		3	4-8-13	21				sandy silt, sand, rock fragments, asphalt, FILL, moist, gray, brown			
	380	4	3-3-3	6			CL	SANDY LEAN CLAY, moist, brown		B	
10		5	4-4-3	7				SANDY SILT, moist, brown contains trace quartz fragments @ 9.0'			
	375	6	3-2-2	4	▼			moist, brown, light brown @ 14.0'			
15	370	7	3-2-3	5							
20	365	8	3-6-8	14	▽			contains rock fragments @ 24.0'			
25	360	9	6-6-9	15				moist, brown @ 29.0'	Residual		
30	355	10	6-10-16	26			ML				
35	350	11	5-8-15	23							
40	345	12	5-10-13	23							
45	340	13	5-10-13	23							
50	335	14	10-18-24	42							
55	330	15	20-36-55	41				DISINTEGRATED ROCK, moist, brown	*	C	* Disintegrated Rock
60								Bottom of Test Boring @ 60.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/26/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-12
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 388.0
Date Started : 8-8-14
Date Completed : 8-8-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-8	10:10	---	---	---
Completion	8-8	10:15	34.9	58.5	---
Casing Pulled	8-8	10:40	24.2	None	30.2
	8-11	07:05	14.0	None	24.1

Depth (ft)	Surf. Elev. 388.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	4-3-4	7				lean clay, with sand, silt with sand, trace rock fragments, FILL, moist, brown	Fill	A	Asphalt = 0.6'
	385	2	3-3-4	7				silt with sand, rock fragments, trace organic matter, FILL, moist, brown			
5		3	2-6-4	10				moist, gray-brown at 4.5'			
		4	2-2-4	6			CL	SANDY LEAN CLAY, moist, brown		B	
	380										
10		5	3-2-3	5			ML	SILT with sand, moist, brown, light brown			
	375				▼						
15		6	2-4-5	9				SANDY SILT, moist, brown			
	370										
20		7	4-5-10	15							
	365										
25		8	5-11-14	25							
	360										
30		9	4-11-17	28				contains quartz fragments @ 29.0'	Residual		
	355										
35		10	4-4-6	10			ML				
	350										
40		11	8-11-15	26							
	345										
45		12	8-13-23	36							
	340										
50		13	19-24-32	56							
	335										
55		14	15-30-41	71				DISINTEGRATED ROCK, moist, brown	*	C	Disintegrated Rock
	330										
60		15	6-15-26	41			ML	SANDY SILT, moist, brown	*	B	Residual
								Bottom of Test Boring @ 60.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/19/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-13
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 388.0
Date Started : 8-7-14
Date Completed : 8-7-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-7	09:40	43.8	44.0	---
Completion	8-7	10:15	44.5	58.5	---
Casing Pulled	8-7	10:55	17.3	None	18.6
	8-8	06:45	12.9	None	30.3

Depth (ft)	Surf. Elev. 388.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	4-3-3	6				silt, with sand, rock fragments, FILL, moist, brown		A	Asphalt = 0.7'
	385	2	4-3-2	5				silt, with sand, trace rock fragments, FILL, moist, brown	Fill		
5		3	2-2-6	8				silt with sand, trace rock fragments and organic matter, FILL, moist, brown			
	380	4	2-3-4	7			CL	LEAN CLAY, with sand, moist, brown		B	
10		5	2-4-3	7	▼		ML	SANDY SILT, moist, brown			
	375										
15		6	2-3-4	7			ML	SILT with sand, moist, brown			
	370										
20		7	3-4-5	9							
	365										
25		8	4-5-8	13				SANDY SILT, moist, brown	Residual		
	360										
30		9	5-10-11	21							
	355										
35		10	6-9-9	18			ML				
	350										
40		11	4-7-10	17							
	345				▽						
45		12	7-10-13	23				moist, light brown, brown @ 44.0'			
	340										
50		13	18-29-33	62				DISINTEGRATED ROCK, moist, brown	*	C	* Disintegrated Rock
	335										
55		14	6-19-27	46			ML	SANDY SILT, moist, brown	Residual	B	
	330										
60		15	20-31-37	68				DISINTEGRATED ROCK, moist, brown	*	C	* Disintegrated Rock
								Bottom of Test Boring @ 60.0'			

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-14
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location:
Vienna, Virginia

Ground Surf. El. (±) : 388.0
Date Started : 8-5-14
Date Completed : 8-5-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS					
	Date	Time	Depth	Casing	Caved
Encountered	8-5	11:40	20.8	29.0	---
Completion	8-5	13:10	41.8	58.5	---
Casing Pulled	8-5	13:45	13.1	None	51.8
	8-6	06:35	11.6	None	40.2

Depth (ft)	Surf. Elev. 388.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	3-3-3	6				silt with sand, FILL, gravel, trace organic matter, moist, graybrown	Fill	A	Asphalt = 0.7'
	385	2	3-2-3	5				sandy silt, FILL, moist, brown			
5		3	2-3-4	7			ML	SANDY SILT, moist, brown	Residual	B	
		4	4-3-2	5				rock fragments @ 6.5'			
	380							SILT with sand, moist, brown			
10		5	1-2-2	4	▼		ML				
	375										
15		6	2-4-6	10				SANDY SILT, moist, brown			
	370										
20		7	10-19-24	43	▽						
	365										
25		8	3-4-7	11			ML				
	360										
30		9	4-16-22	38							
	355										
35		10	17-27-32	59							
	350										
40		11	51-49/3"	100/9"				DISINTEGRATED ROCK, moist, brown	Disintegrated Rock	C	
	345										
45		12	39-31-37	68							
	340										
50		13	104/6"	104/6"							
	335										
55		14	38-56-10/1"	66/7"							
	330										
		15	77-23/1"	100/7"				Bottom of Test Boring @ 59.1'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/19/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: B-15
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 389.0
Date Started : 8-1-14
Date Completed : 8-1-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-1	12:30	26.1	40.0	---
Completion	8-1	13:30	25.1	58.5	---
Casing Pulled	8-1	14:10	13.4	40.0	48.1
	8-5	01:50	11.1	40.0	---
	8-6	08:10	11.1	40.0	---

Depth (ft)	Surf. Elev. 389.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	3-4-4	8				sandy silt, FILL, rock fragments, moist, brown	Fill	A	Asphalt = 0.7'
		2	3-3-4	7				silt with sand, FILL, rock fragments, moist, brown			
5	385	3	2-3-4	7			CL	LEAN CLAY, with sand, moist, brown, contains roots		B	Temporary standpipe set to 40' after completion of drilling
		4	3-4-4	8			ML	SILT with sand, trace gravel, moist, light brown			
10	380	5	1-2-2	4	▼			SANDY SILT, moist, brown, light gray			
15	375	6	3-6-7	13				moist, brown @ 14.0'			
20	370	7	5-7-8	15					Residual		
25	365	8	6-10-13	23	▽		ML				
30	360	9	9-13-18	31							
35	355	10	5-6-8	14							
40	350	11	19-33-38	71				DISINTEGRATED ROCK, moist, gray, brown	*	C	* Disintegrated Rock
45	345	12	6-7-9	16				SILT with sand, moist, brown, light brown	Residual	B	
50	340	13	13-17-21	38			ML	moist, light brown @ 49.0'			
55	335	14	19-52-48/3"	100/9"				DISINTEGRATED ROCK, moist, brown	*	C	* Disintegrated Rock
	330	15	103/6"	103/6"				Bottom of Test Boring @ 59.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/26/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: EX-1
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 390.0
Date Started : 8-13-14
Date Completed : 8-13-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-13	08:20	---	---	---
Completion	8-13	08:30	29.6	30.0	2" Well
Casing Pulled	8-13	10:10	12.4	30.0	2" Well
	8-14	06:45	12.3	30.0	2" Well
	8-20	07:40	12.1	30.0	2" Well

Depth (ft)	Surf. Elev. 390.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	6-3-4	7				sandy lean clay, sandy silt, rock fragments, roots, FILL, moist, gray-brown	Fill	A	Asphalt = 0.5'
		2	3-4-5	9				sandy silt, gravel, concrete, FILL, moist, brown			
5	385	3	3-3-3	6			ML	SANDY SILT, moist, brown	Residual	B	
		4	4-5-6	11			ML	SILTY SAND, moist, brown			
10	380	5	3-5-6	11	▼		ML	SANDY SILT, moist, brown			
15	375	6	1-3-3	6			ML	SILT with sand, moist, brown			
20	370	7	3-3-5	8							
25	365	8	3-5-8	13			ML	SANDY SILT, moist, brown			
30	360	9	3-6-8	14				Bottom of Test Boring @ 30.0'			

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: EX-2
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 391.0
Date Started : 8-14-14
Date Completed : 8-14-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-14	08:30	28.1	28.5	---
Completion	8-14	08:40	Wet	None	16.4
Casing Pulled	8-14	13:05	12.7	None	13.8

Depth (ft)	Surf. Elev. 391.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	5-5-3	8				silty sand, sandy silt, crushed stone, FILL, moist, brown-gray	Fill	A	Asphalt = 0.8'
		2	5-6-5	11			CL	LEAN CLAY, with sand, moist, brown, contains trace roots	Residual	B	
5	385	3	5-6-4	10			ML	SANDY SILT, moist, brown contains rock fragments @ 4.5'			
		4	3-3-3	6							
10	380	5	2-2-3	5	▼			SILT with sand, moist, brown			
15	375	6	3-3-3	6			ML	moist, light brown @ 14.0'			
20	370	7	6-6-8	14				SANDY SILT, moist, brown			
25	365	8	6-11-14	25	▽		ML				
30		9	13-27-39	68				DISINTEGRATED ROCK, moist, brown	*	C	* Disintegrated Rock
								Bottom of Test Boring @ 30.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 9/3/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: EX-3
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 392.0
Date Started : 8-13-14
Date Completed : 8-13-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-13	12:10	---	---	---
Completion	8-13	12:15	29.5	30.0	2" Well
Casing Pulled	8-13	13:40	12.5	30.0	2" Well
	8-14	06:50	11.0	30.0	2" Well
	8-20	11:20	11.0	30.0	2" Well

Depth (ft)	Surf. Elev. 392.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	4-3-3	6				silt with sand, rock fragments, roots, FILL, moist, brown	Fill	A	Asphalt = 0.7'
	390	2	3-4-5	9			CL	LEAN CLAY, with sand, moist, brown		B	
5		3	3-5-4	9				SANDY SILT, moist, brown contains trace rock fragments @ 4.5'	Residual		
	385	4	2-2-3	5							
10		5	2-5-7	12	▼						
	380										
15		6	4-7-9	16			ML				
	375										
20		7	8-12-13	25							
	370										
25		8	6-13-16	29							
	365										
30		9	6-11-12	23				Bottom of Test Boring @ 30.0'			

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: EX-4
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 387.0
Date Started : 8-11-14
Date Completed : 8-11-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-11	10:50	23.8	24.0	---
Completion	8-11	11:20	20.1	30.0	2" Well
Casing Pulled	8-11	13:30	12.8	30.0	2" Well
	8-12	09:00	13.0	30.0	2" Well
	8-20	09:20	12.5	30.0	2" Well

Depth (ft)	Surf. Elev. 387.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0		1	3-3-4	7				lean clay, with sand, silt with sand, rock fragments, FILL, moist, brown	Fill	A	Asphalt = 0.3'
	385	2	2-1-4	5				silty sand,rock fragments, organic matter, FILL, moist, brown			
5		3	3-3-3	6			CL	SANDY LEAN CLAY, moist, brown		B	
	380	4	2-3-3	6				SANDY SILT, moist, brown			
10		5	2-2-2	4	▼						
	375										
15		6	2-4-6	10					Residual		
	370						ML				
20		7	4-5-9	14							
	365				▽						
25		8	3-6-7	13							
	360										
30		9	3-4-6	10				Bottom of Test Boring @ 30.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/26/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: EX-5
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 390.0
Date Started : 8-14-14
Date Completed : 8-14-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-14	09:40	---	---	---
Completion	8-14	09:45	None	28.5	---
Casing Pulled	8-14	09:55	22.9	None	23.4
	8-14	13:15	Wet	None	16.4

Depth (ft)	Surf. Elev. 390.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	4-5-4	9				silt with sand, FILL, moist, brown, contains trace organic matter	Fill	A	Asphalt = 0.6'
		2	4-4-3	7				silt with sand, FILL, moist, brown, contains rock fragments			Poor Recovery @ 2.5'
5	385	3	2-3-4	7				silt with sand, FILL, moist, brown, contains roots adn organic matter			
		4	3-3-5	8			ML	SILT with sand, moist, brown		B	
10	380	5	2-3-2	5			ML	SILT, trace sand, moist, brown and light brown			
15	375	6	4-5-8	13				SANDY SILT, moist, brown	Residual		
20	370	7	4-7-9	16			ML				
25	365	8	3-4-6	10							
30	360	9	3-6-8	14							
								Bottom of Test Boring @ 30.0'			

TEST_BORING_LOG 14107.GPJ KOZERA.GDT 8/26/14

D. W. KOZERA, INC.
Baltimore, Maryland
PROFESSIONAL ENGINEERS & GEOLOGISTS

TEST BORING LOG

Boring No.: EX-6
Contract No.: 14107.D
Page: 1 of 1

Project: 444 Maple Avenue
Location: Vienna, Virginia

Ground Surf. El. (±) : 390.0
Date Started : 8-14-14
Date Completed : 8-14-14
Contractor : GeoServices, Corp., Inc
Driller : S. Gonzalez
Rig : cme 45, Auto Hammer
Drill Method : 2 1/4" HSA
Inspector : A. MacLeod

GROUNDWATER OBSERVATIONS

	Date	Time	Depth	Casing	Caved
Encountered	8-14	11:30	---	---	---
Completion	8-14	11:45	22.3	30.0	2" Well
Casing Pulled	8-14	13:40	12.1	30.0	2" Well
	8-15	12:00	12.0	30.0	2" Well
	8-20	10:40	12.0	30.0	2" Well

Depth (ft)	Surf. Elev. 390.0	Samples	Blow Counts	"N" Value	Water Level	Graphic	USCS	Description	Formation	Stratum	Remarks
0	390	1	4-5-5	10				silt with sand, rock fragments, FILL, moist, brown	Fill	A	Asphalt = 0.7'
		2	2-3-3	6							
5	385	3	3-4-4	8			CL	LEAN CLAY, with sand, moist, brown, contains roots	Residual	B	
		4	3-3-4	7			SM	SILTY SAND, moist, brown, contains trace rock fragments			
10	380	5	2-2-2	4	▼		ML	SILT with sand, moist, light brown-brown			
15	375	6	6-11-11	22				SANDY SILT, moist, brown			
20	370	7	3-4-7	11			ML				
25	365	8	7-10-12	22							
30	360	9	5-6-10	16				Bottom of Test Boring @ 30.0'			

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