LINE SCHEDULE

LINE NUMBER	COLOR	FIELD ELEVATION	LENGTH (FT)
1	ORANGE	4.8	40
2	BLUE	5.9	66
3	RED	6.7	76
4	YELLOW	7.7	96
5	BLUE	9.1	107
6	YELLOW	10.2	120
7	ORANGE	11.8	120

434' TOTAL

APPROVED JUL 08 2014

AZP

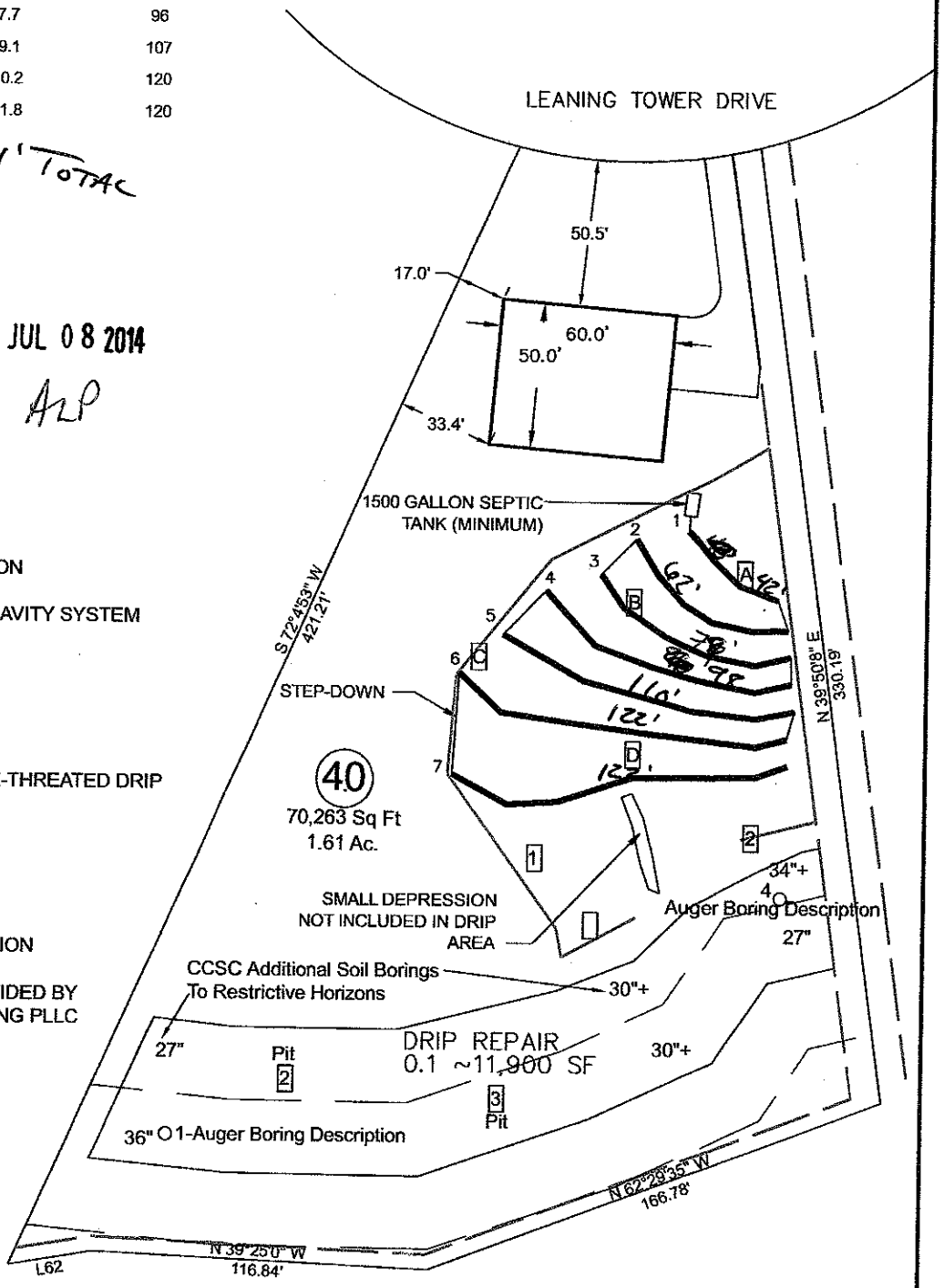
LOT 40 BELLS CROSSING SUBDIVISION

5-BEDROOM ACCEPTED STATUS GRAVITY SYSTEM
LINES 4-8 TOTAL 625 LINEAR FEET
EZFLOW OR CHAMBER
LTAR 0.25
25% REDUCTION
20" TRENCH DEPTH MAX

5-BEDROOM SUBSURFACE TS-II PRE-THREATED DRIP IRRIGATION REPAIR
11900 SF OF TOTAL AREA
LTAR 0.1
6" TRENCH DEPTH MAX

FOR GENERAL USE NOT A SURVEY
PRELIMINARY NOT FOR CONSTRUCTION

SOIL PROFILES AND ANALYSIS PROVIDED BY CENTRAL CAROLINA SOIL CONSULTING PLLC



PRIMARY SYSTEM

REPAIR SYSTEM

REPAIR LINES (NOT USED)

PIT OR AUGER BORING A

0 30 60

SCALE:
1" = 60 f t

Bateman Civil Survey Company
Engineers • Surveyors • Planners
200 N. Main Street, Holly Springs, NC 27540 Ph: 919.577.1080 Fax: 919.577.1081
www.batemancivilsurvey.com info@batemancivilsurvey.com
NCBELS Firm No. C-2378

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LOT 40
BELLS CROSSING SUBDIVISION
MOORESVILLE, NC
IREDELL COUNTY

DATE: 06/03/14 DRAWN BY MB CHECKED BY: TMB

Sheet:
Property ID:
Lot #:
File #:
AppID:

CCSC SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Meritage Homes
Applicant:
Address:
Date Evaluated: 7/3/2014
Proposed Facility: Design Flow (.1949)
Property Size:
Location of Site: Bells Crossing lot 40
Property Recorded:
Water Supply: [ ] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [X] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	Toe Slope	A, 0-3	SG, SL	VFR, NS, NP	10 YR 3/2				
Hand	3-6%	E, 3-13	SG, SL	VFR, NS, NP	10 YR 4/6				
Auger		Bt 13-33	SBK, SCL	FR, SS, SP	10 YR 5/8	PS			PS, 0.1
		AR @ 33"							
2	Toe Slope	A, 0-6	SG, SL	VFR, NS, NP	10 YR 3/2				
Pit	3-6%	E, 6-18	SG, SL	VFR, NS, NP	10 YR 4/6	PS			PS, 0.15
		Bt1, 18-26	SBK, SCL	FR, SS, SP	10 YR 6/8	PS			PS, 0.1
					10 YR 7/3, 10%				
		Bt2, 26+	SBK, SCL	FR, SS, SP	10 YR 6/8	UN			
					10 YR 7/3, 15%				
					10 YR 6/1, 10%				
3	Toe Slope	A, 0-2	SG, SL	VFR, NS, NP	10 YR 3/2				
Pit	3-6%	E, 2-10	SG, SL	VFR, NS, NP	10 YR 5/6				
		Bt1, 10-23	SBK, SCL	FI, SS, SP	7.5 YR 5/8	PS			PS, 0.1
		Bt2, 23+	SBK, SCL	FI, SS, SP	10 YR 6/8	UN			
					10 YR 5/2, 10%				
4	Toe Slope	A, 0-2	SG, S:L	VFR, NS, NP	10 YR 3/2				
Auger	6%	E, 2-6	SG, S:L	VFR, NS, NP	10 YR 4/6				
		Bt1, 6-17	SBK, SCL	FI, SS, SP	10 YR 5/8				
		Bt2, 17-33	SBK, SCL	FI, SS, SP	10 YR 5/6	UN			
					10 YR 8/4, 15%				
		Bt3, 33+	SBK, SCL	FI, SS, SP	10 YR 5/6				
					10 YR 6/1, 15%				

Description	Initial System	Repair System
Available Space (.1945)	Yes	Yes
System Type(s)	Accepted	Pretreat, TS II, SSD

Other Factors (.1946):
Soil Evaluation By: Jason Hall
Others Present:

LICENSED SOIL SCIENTIST JASON M. HALL 1348 STATE OF NORTH CAROLINA

APPROVED JUL 08 2014 AP

Site LTAR		0.1

Site Classification (.1948): Provisonally Suitable

Site Evaluation By:

Others Present:

Sheet:

FILE #:

COMMENTS:

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace				
FP-Flood Plain		CL-Clay Loam		
		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations

Property ID:
Lot #: 40 Pg 1 of 3
File #:
AppID:

CCSC SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Meritage Homes
Address: 11605 N. Community House Rd, Charlotte NC 28277
Proposed Facility: SFR House Design Flow (.1949) 600
Location of Site: Bells Crossing Lot 40 Pg 1

Applicant: Same
Date Evaluated: 03/09/13
Property Size: 1.61
Property Recorded:

Water Supply: [X] Public [ ] Individual [X] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [ ] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon	Depth (IN.)	SOIL MORPHOLOGY .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr. Horiz	Profile Class & LTAR
A	SS 7%	A	0-6"	Gr SL	VFR NS NP	7.5YR 5/6				
		Bt1	6-24"	SBK Clay	FI SS SP	2.5YR 4/8	PS			PS .3
		Bt2	24-38"	SBK Clay	FI, SS, SP	10YR 6/8 5% → 2.5YR 4/8 10YR 6/8 20% 10YR 8/1 relict	PS			PS .275
		BC	38-48	WEK SBK CL	FR, SS, SP	5YR 5/8 10YR 8/1 relict 10%	S			S .3
B	SS 6%	A	0-6	Gr SL	VFR NS NP	7.5YR 5/6				
		Bt1	6-15	SBK Clay	FI SS SP	2.5YR 4/8 10YR 6/8 5%				
		Bt2	15-24	SBK Clay	FI SS SP	2.5YR 5/8 10YR 6/8 20% 10YR 8/1 relict 10%	PS			PS .275
		BC	24-32	WEK SBK Clay	FI SS SP	5YR 5/8 2.5YR 4/8 15% 10YR 8/1 relict 10%	PS			PS .275
		CB	32+	Mass, Clay	FI, S, P	10YR 5/8 2.5YR 4/6 20% 10YR 6/2 15% 10YR 8/1 relict 10%	LNS			LN

Description	Initial System	Repair System
Available Space (.1945)	Yes	Yes
System Type(s)	Accepted	Drip
Site LTAR	0.275	0.1

Other Factors (.1946):
Soil Evaluation By: JH, MB
Others Present:
Site Classification (.1948):
Site Evaluation By: Same
Others Present:

LICENSED SOIL SCIENTIST JASON M. HA 1248 STATE OF NORTH CAROLINA

APPROVED JUL 08 2014

CCSC SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Property ID:

LICENSED SOIL SCIENTIST
JASON M. HA
STATE OF NORTH CAROLINA
1248

Owner: Meritage Homes
Address: 11605 N. Community House Rd, Charlotte NC 28277
Proposed Facility: 6 BR House Design Flow (.1949) 600
Location of Site: Bells crossing Lot 40 Pg 2

Applicant:
Date Evaluated:
Property Size:
Property Recorded:

Water Supply:	[X] Public	[ ] Individual	[X] Well	[ ] Spring	Other
Evaluation Method:	[ ] Auger Boring		[X] Pit	[ ] Cut	
Type of Wastewater:	[ ] Sewage		[ ] Industrial Process	[ ] Mixed	

PROFILE #	.1940 Landscape Position/ Slope%	Horizon	Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Saprо Class	.1944 Restr Horiz	Profile Class & LTAR
C	SS 6%	A	0-2"	Gr SL	VFR NS NP	7.5YR 5/6				
		BT	2-28"	SBK Clay	FI SS SP	→ 2.5YR 4/8 10YR 6/8 5%				
		BC	28-46"	SBK CL	FI SS SP	→ 5YR 5/8 2.5YR 4/6 20% 10YR 8/1 Relict				PS 0.3
D		A	0-2	Gr SL	VFR NS NP	7.5YR 5/6				
		BT1	2-31"	SBK Clay	FI SS SP	2.5YR 4/8				PS 0.3
		BT2	31-46"	SBK SC	FI SS SP	2.5YR 4/8 10YR 6/8 10%				PS 0.3

Description	Initial System	Repair System
Available Space (.1945)	Yes	Yes
System Type(s)	Accepted	Drip
Site LTAR	0.275	0.1

Other Factors (.1946): Weathered Rock in front of Pit C
Soil Evaluation By: JH, MB
Others Present:
Site Classification (.1948):
Site Evaluation By: Same
Others Present:

APPROVED JUL 08 2014

Property ID:
Lot #: 40
File #:
AppID:

CCSC SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Meritage Homes
Applicant: Same
Address: North Community House Road, Charlotte, NC
Date Evaluated:
Proposed Facility: 5 BR House
Design Flow (.1949) 600
Property Size:
Location of Site: Bells Crossing Lot 40 Pg 3
Property Recorded:
Water Supply: [X] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [X] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1950 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	Linear Slope	A, 0-2	GR, SL	VFR, NS, NP	10 YR 2/1				
Auger	10%	E, 2-10	GR, SL	VFR, NS, NP	10 YR 4/4				
		Bt1, 10-31	SBK, SCL	FI, SS, SP	7.5 YR 5/8	PS,			PS, 0.3
	Auger Refusal	Bt2, 32-32"	SBK, SCL	FI, SS, SP	7.5 YR 5/8	UN			
					7.5 YR 6/2, 15%				
2	Linear Slope	A, 0-1	GR, SL	VFR, NS, NP	10 YR 2/1				
Auger		E, 1-5	GR, SL	VFR, NS, NP	10 YR 4/4				
		Bt1, 5-24	SBK, SCL	FI, SS, SP	7.5 YR 5/8	PS			PS, 0.3
		Bt2, 24-31	SBK, SCL	FI, SS, SP	7.5 YR 5/8	PS,			PS, 0.3
					5 YR 5/8, 15%				
		Bt3, 31+	SBK, SCL	FI, SS, SP	7.5 YR 5/8	UN			
					5 YR 5/8, 20%				
					10 YR 7/1, 10%				

LICENSED SOIL SCIENTIST JASON M. HALL 1245 STATE OF NORTH CAROLINA

Description	Initial System	Repair System
Available Space (.1945)	Yes	Yes
System Type(s)	Accepted	Drip
Site LTAR	0.275	0.1

Other Factors (.1948):
Soil Evaluation By: Jason Hall
Others Present:
Site Classification (.1948): PS
Site Evaluation By: Overall, Jason Hall, Matt Burdette
Others Present:

APPROVED JUL 08 2014