Soil and Environmental Consulting Services, Inc.



Friday, March 01, 2019

AV Investment LLC c/o Adam Bdoyan 5700 Sugarwood Dr, New Albany, OH 43054

Re: Soil investigation for on-site septic disposal for the northwest corner of Harlem Road and Center Village Road, Harlem Township, Delaware County, Ohio.

Enclosed you will find the requested detailed soil descriptions for the northwest corner of Harlem Road and Center Village Road, Harlem Township, Delaware County, Ohio.

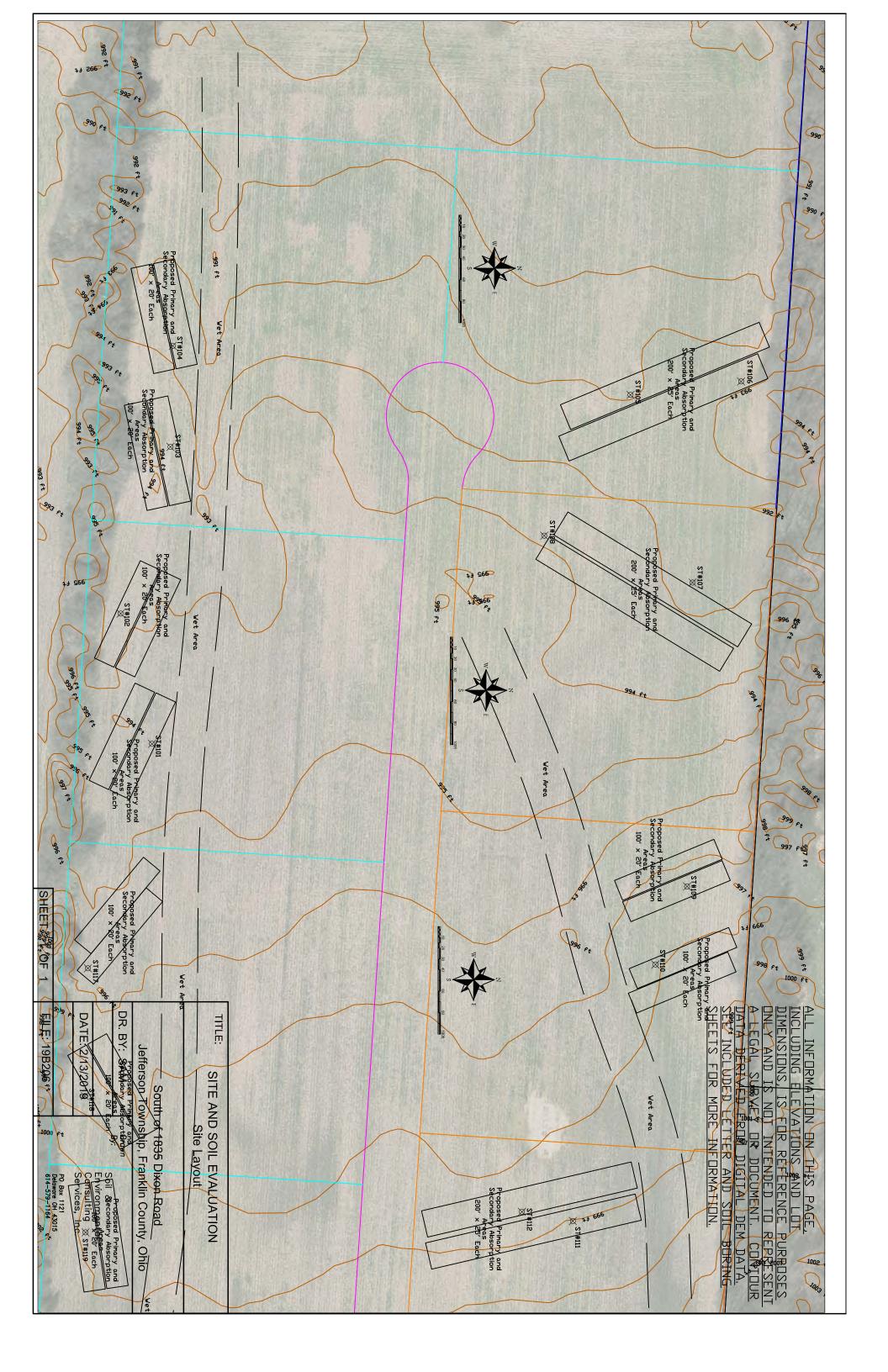
The soils of the selected sites were mapped and described on the enclosed sheets for your records. The locations of the soil borings have been located using GPS and the locations have been delineated on the enclosed map. Copies of this letter, soil boring descriptions, sketch, and system drawing should be submitted to local health department. The health department will make the determination if the soil and site area is suitable for onsite sewage treatment. It may also be necessary for the soil borings to be located by a surveyor.

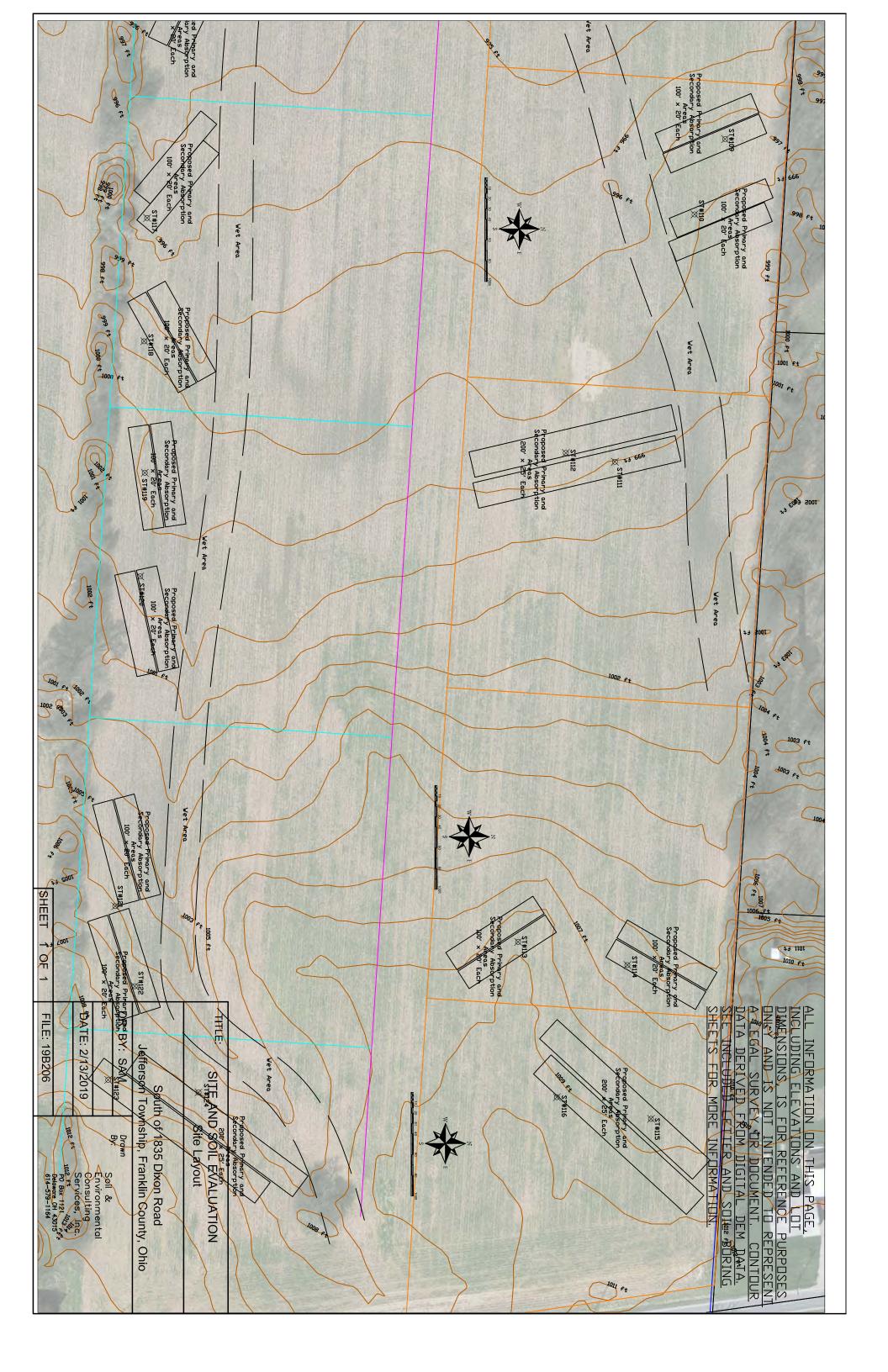
Please protect all areas approved for septic disposal by having the contractor stake and rope off the proposed locations prior to driveway and basement excavation. No soil, building, or waste material should be stored on the proposed absorption areas. Disturbance to the areas may result in compaction and the subsequent failure of the system. Any disturbance to the absorption area voids the results of this analysis.

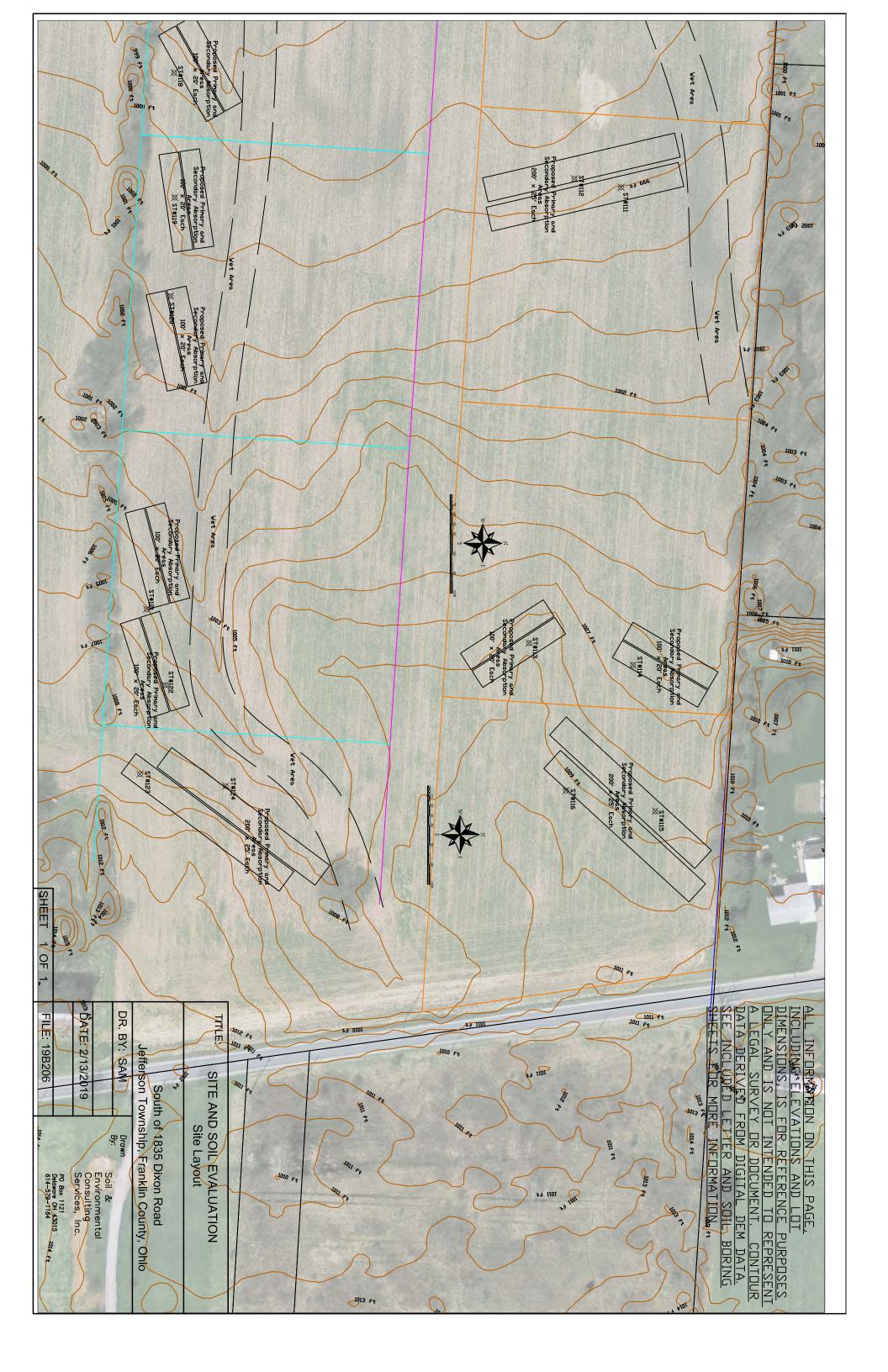
If you have any questions or want to move forward with the septic design process feel free to contact us.

Steven Miller, CPSS









Property A	County:wnship / Sec.:ddress/Location:	NW Corner of and Center V	em Harlem Road illage Road	Land Use / Vegetation: Landform: Position on Landform: Percent Slope: Shape of Slope:		m: Till over Rock m: Backslope pe: 1 to 2%						ascpaes
Ap	plicant Name:	AV Inves	stments	=	Shape of Slope:		Linear / Linear				1 1	25.65
	Address:			I	Bedrooms or GPD:		4				1 1	STEVENA MILLER
				_	Date:	Monda	ay, February 18	, 2019			1 2	CERTIFIED PROFESSIONAL SOIL SCIENTIST #2
	Phone #:			_	Evaluator:	Ste	ven Miller, CP	SSc		V	103	0
	Lot #:	_		_		Soil & Enviro	onmental Cons	ulting, Inc.	Signature:	XD.	A San	28423
	Test Hole #:	10	1	_	-		P.O. Box 1121			L. Min	0 2000	
Latitu	de/Longitude:			_	•	De	laware OH 430	15	Phone#: p	-614.579.	1164	
	Method:	Pit Auger	x Tube	_	Job Number:		19B208		_	soilcon	sultant@ya	ahoo.com
					Soil Series:							
Soil F	Profile	Est	imating Soil Satur	ation			Estimatir	g Soil Perme	ability			
		Munsel	ll Color (hue, value	, chroma)								
			Redoximor	phic Features		Texture			Structure			
Iorizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 6	10YR 3/5/3			sicl	30	2	2	m	gr	fr	
Btg	6 to 20	10YR 5/2	15%10YR 5/2		sicl	35	2	2	m	sbk	fi	
Bt	20 to 35	10YR 5/3		40%10yR 5/2	sic	40	2	2	m	sbk	fi	
ВС	35 to 40	10YR 5/4		35%10YR 5/2	sicl	38	2	1	m	sbk	fi	
Cd	40	10YR 4/4	YR 4/4 15%10YR 5/2		cl	35	5	0			vfi	
Limiting Conditions Depth to (in.) Description				Description				Rem	arks / Risk Fac	etors:		
	Water Table	6		ched on glacial till						e may he nre	sent	

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>50

>50 >50

40

Apparent Water Table Highly Permeable Material

Restrictive Layer

Bedrock

	County:	Harlem Landform: Till over Rock										
To	ownship / Sec.:			ī	Landform:			-				1.4
Property A	ddress/Location:	NW Corner of	Harlem Road	Pos	ition on Landform:		Backslope				1	
		and Center V	illage Road		Percent Slope:		1 to 2%				/ /	cacpaes
Ap	plicant Name:	AV Inves	stments	•	Shape of Slope:		Linear / Linear				18	Secretary Control of the Control of
	Address:			I	Bedrooms or GPD:		4				1 120	STEVENA MILLER
				•	Date:	Mond	ay, February 18	3, 2019			', '	CERTIFIED PROFESSIONAL
	Phone #:			•	Evaluator:	Ste	even Miller, CP	SSc		1)	4 0 3	O SUL SUIGHTIST
	Lot #:				•	Soil & Envir	onmental Cons	ulting, Inc.	Signature:	No	1 b.	28424
	Test Hole #:	102	2	•	•		P.O. Box 1121		Ü	Luch	7 / /	
Latitu	ide/Longitude:			•	•		elaware OH 430		Phone#: p	-614.579.	1164	
		Pit Auger	X Tube	•	Job Number:		19B208				sultant@ya	ahoo.com
					Soil Series:							
Soil I	Profile	Est	imating Soil Satur	ation			Estimatir	ng Soil Permea	ability			
			l Color (hue, value,					J	· ·			
				ohic Features		Texture			Structure			
	Depth	Matrix				Approx.	Approx. %			Туре	1	
Iorizon	(inches)	Color	Concentrations	Depletions	Class	% Clay	Fragments	Grade	Size	(shape)	Consistence	Other Soil Features
Ap1	0 to 6	10YR 4/3			sicl	30	2	2	m	gr	fr	
Ap2	6 to 11	10YR 3/2	15%10YR 5/6	5%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Btg	11 to 43	10YR 5/2		35%10YR 5/2	sic	40	2	2	m	sbk	fi	
ВС	43 to 49	10YR 5/4		30%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	49+	10YR 4/4		25%10Yr 5/2 cl			5	0			vfi	
Limiting	Conditions	Depth to (i	n.)	Description				Rem	arks / Risk Fac	tors:		

Surface water should be diverted around system. Subsurface ag drainage may be present.

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

perched on glacial till

glacial till

6 >50

>50

>50

49

Perched Seasonal Water Table

Apparent Water Table

Restrictive Layer

	County:	Delav	vare	Lanc	d Use / Vegetation:		Corn Stubble					
To	ownship / Sec.:	Harle	em		Landform:		Till over Rock					
Property A	Address/Location:	NW Corner of	Harlem Road	Posi	ition on Landform:		Backslope				/ /	
		and Center V	illage Road		Percent Slope:		1 to 2%				1 1	crecpaes \
Ap	pplicant Name:	AV Inve	stments		Shape of Slope:		Linear / Linear	r			18	
	Address:			F	Bedrooms or GPD:		4				1 120	STEVENA MILLER
					Date:	Monda	ay, February 18	3, 2019			' '	CERTIFIED PROFESSIONAL
	Phone #:				Evaluator:	Ste	ven Miller, CP	SSc		()	103	O SUL SUBIRIS
	Lot #:	_			•	Soil & Enviro	onmental Cons	ulting, Inc.	Signature:	XO.	4 Ja.	28423
	Test Hole #:	10.	3	P.O. Box 1121 Delaware OH 43015				i can	7 7000			
Latitu	ıde/Longitude:				Delaware OH 43015			Phone#: 1	-614.579.	1164		
	Method:	Pit Auge	r X Tube	Job Number: 19B208			19B208			soilcon	sultant@ya	ahoo.com
					Soil Series:							
Soil I	Profile	Est	imating Soil Satura	ation			Estimatiı	ng Soil Permea	bility			
		Munse	ll Color (hue, value,	chroma)								
			Redoximorp	ohic Features		Texture			Structure			
Iorizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap1	0 to 7	10YR 4/3			sicl	30	2	2	m	gr	fr	
Ap2	7 to 12	10YR 3/2		10%10yR 5/2	sicl	35	2	2	m	sbk	fi	
Btg	12 to 41	10YR 6/1	25%10vR 5/4		sic	40	2.	2.	m	shk	fi	

36

35

sicl

cl

2

5

0

sbk

fi

vfi

Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:								
Perched Seasonal Water Table	7	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.								
Apparent Water Table	>50										
Highly Permeable Material	>50										
Bedrock	>50										
Restrictive Layer	45	glacial till									

35%10YR 5/2

25%10Yr 5/2

41 to 45

45+

BC

Cd

10YR 5/3

10YR 4/4

Property A	County: Downship / Sec.: Address/Location: Poplicant Name: Address: Phone #: Lot #: Test Hole #: ide/Longitude: Method:	Delaw Harle NW Corner of and Center V AV Inves 104	em Harlem Road illage Road stments	Posi	Landform: Landform: Ition on Landform: Percent Slope: Shape of Slope: Bedrooms or GPD: Date: Evaluator: Job Number:	Mond Ste Soil & Envir	Corn Stubble Till over Rock Backslope 1 to 2% Linear / Linear 4 ay, February 18 even Miller, CP commental Cons P.O. Box 1121 claware OH 430 19B208	3, 2019 SSc ulting, Inc.	Signature: Phone#: <u>p</u>	-614.579. soilcon	1164 sultant@ya	STEVENA MILLER CERTIFIED PROFESSIONAL SOIL SOILINGST 28423
					Soil Series:							
Soil I	Profile		imating Soil Satur Il Color (hue, value				Estimatir	ng Soil Permea	ability			
				phic Features		Texture			Structure			
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 8	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	8 to 22	10Yr 5/3		15%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	22 to 38	10Yr 5/4		20%10YR 5/2	sic	40	2	2	m	sbk	fi	
ВС	38 to 42	10YR 5/4		25%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	42+	10YR 4/4	10YR 4/4 20%10YR 5/2			35	5	0			vfi	
_	Limiting Conditions Depth to (in.) Description								arks / Risk Fac			
			ched on glacial till	Surface water	r should be div	verted around s	ystem. Subsur	face ag drainage	may be pre	sent.		

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>50

>50

>50 42

Apparent Water Table

Restrictive Layer

Property A	County: Delaware Township / Sec.: Harlem roperty Address/Location: NW Corner of Harlem Road and Center Village Road Applicant Name: AV Investments Address: Phone #: Lot #: Test Hole #: 105 Latitude/Longitude: Method: Pit Auger X Tube			Pos	d Use / Vegetation:	Mond Ste Soil & Envir	1 to 2% Linear / Linear 4 ay, February 18 even Miller, CP conmental Const P.O. Box 1121	8, 2019 SSc ulting, Inc.	Signature:	Sla Sla	A Can	STEVEN A MILLER CERTIFED PROFESSIONAL SOIL SCIENTST / 4
Latitu		Pit Auge	r <u>X</u> Tube	-	Job Number:	De	elaware OH 430 19B208	015	Phone#: 1	o-614.579. soilcor	nsultant@ya	ahoo.com
					Soil Series:							
Soil F	Profile		timating Soil Satur ell Color (hue, value				Estimatir	ng Soil Perme	ability			
orizon				ohic Features Depletions	Class	Texture Approx. % Clay	Approx. % Fragments	Grade	Structure	Type (shape)	Consistence	Other Soil Features
Ap	(inches) Color Concentrations 0 to 9 10YR 4/3			•	sicl	28	2	2	m	gr	fr	
Bt1	9 to 19	10YR 5/4		20%10YR 5/2	sicl	35	5	2	m	sbk	fi	
Bt2	19 to 32	10YR 5/4		25%10YR 5/2	sic	40	10	2	m	sbk	fi	
R	32+											
Limiting Conditions Depth to (in.)			Description				Rem	narks / Risk Fa	ctors:			
2d Seasonal Water Table 9 ent Water Table >50				Surface water	should be di	verted around s		rface ag drainag		esent.		
Permeable		>50										

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

32 32

Bedrock

Restrictive Layer

	County:	Delaw	are	Land	d Use / Vegetation:		Corn Stubble					Mary and and the same
To	ownship / Sec.:	Harle	em	•	Landform:		Till over Rock					
Property A	Address/Location:	NW Corner of	Harlem Road	Pos	ition on Landform:		Backslope				/ /	
		and Center V	illage Road		Percent Slope:		1 to 2%				11	CACCOCES
Ap	pplicant Name:	AV Inves	stments	-	Shape of Slope:		Linear / Linear	r			1 12	Secretary of the second
	Address:			. 1	Bedrooms or GPD:		4				1 1	STEVENA MILLER
					Date:		ay, February 1			,	, ,	CERTIFIED PROFESSIONAL III
	Phone #:				Evaluator:		ven Miller, CF			V	103	0
		100					onmental Cons		Signature:	X Lla	H San	28424
		100	6	•			P.O. Box 1121					
Latitu	ide/Longitude:			•			elaware OH 430	015	Phone#: p			
	Method:	Pit Auger	Tube X		Job Number:		19B208			soilcon	sultant@ya	ahoo.com
					Soil Series:							
6 9 1	D 61	TP 42		1.			E 4: 4:	C 11 D	. •1•4			
5011 1	Profile		imating Soil Satur				Estimati	ng Soil Permeal	omty			
	1	Munsel	l Color (hue, value,	ohic Features		Texture			Structure		1	
	D 4	M 4 :	Redoxillor	onic reatures			A 0/		Structure	т		
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 9	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	9 to 20	10YR 5/4		25%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	20 to 32	10YR 5/4		30%10YR 5/2	sic	40	5	2	m	sbk	fi	
ВС	40 to 42	10YR 5/4		25%10YR 5/2	sicl	38	5	1	m	sbk	fi	
Cd	42 to 50	10RY 4/4		15%10YR 5/2	cl	35	10	0		m	vfi	
R	50+											

Limiting ConditionsDepth to (in.)DescriptionRemarks / Risk Factors:Perched Seasonal Water Table9perched on glacial tillSurface water should be diverted around system. Subsurface ag drainage may be present.Apparent Water Table>50Highly Permeable Material>50Bedrock50Bedrock50Restrictive Layer42glacial till

	County:	Delaw	/are	Land	d Use / Vegetation:		Corn Stubble					
To	ownship / Sec.:	Harle	em	•	Landform:		Till over Rock	ζ			,	
Property A	Address/Location:	NW Corner of	Harlem Road	Pos	ition on Landform:		Backslope				//	
		and Center V	illage Road	•	Percent Slope:		1 to 2%				1 1	crecpaes
Ap	oplicant Name:	AV Inves	stments	•	Shape of Slope:		Linear / Linear	r			1 18	Control of the Control
	Address:			I	Bedrooms or GPD:		4				1 1	STEVENA MILLER
				•	Date:	Mond	ay, February 18	8, 2019		,	` ` `	CERTIFIED PROFESSIONAL
	Phone #:			ī	Evaluator:	Ste	even Miller, CF	PSSc		V	103	0
	Lot #:			•		Soil & Envir	onmental Cons	sulting, Inc.	Signature:	XI	A Jan	28423
	Test Hole #:	10'	7				P.O. Box 1121			DO M	0 2 0	
Latitu	ıde/Longitude:					De	elaware OH 430	015	Phone#: p	-614.579.		
	Method:	Pit Auger	X Tube		Job Number:		19B208			soilcon	sultant@ya	ahoo.com
					Soil Series:							
a n	D 011	72 (1)					T 4 4	~	***			
Soil	Profile		imating Soil Satur				Estimati	ng Soil Permeal	oility			
		Munsel	ll Color (hue, value,	/		m .			<u> </u>			
			Redoximorp	ohic Features		Texture			Structure	1	ļ	
lorizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 9	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	9 to 22	10YR 5/3		15%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	22 to 40	10YR 5/4		20%10YR 5/2	sic	40	5	2	m	sbk	fi	

38

35

sicl

cl

5

10

0

sbk

m

fi

vfi

Limiting Conditions	Depth to (in.)	Description			Remar	ks / Risk Fact	tors:						
Perched Seasonal Water Table	9	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.										
Apparent Water Table	>50												
Highly Permeable Material	>50												
Bedrock	>50												
Restrictive Layer	45	glacial till											

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

15%10YR 5/2

10%10Yr 5/2

BC

Cd

40 to 45

45+

10YR 5/4

10RY 4/4

	County:	Delaw	/are	Land	d Use / Vegetation:		Corn Stubble						
To	ownship / Sec.:	Harle	em	•	Landform:		Till over Rock				,		
Property A	ddress/Location:	NW Corner of	Harlem Road	Pos	ition on Landform:		Backslope				· / /		
		and Center V	illage Road		Percent Slope:		1 to 2%					orcpacs \	
Ap	plicant Name:	AV Inves	stments	•	Shape of Slope:		Linear / Linear	r			1 19	Secretary of the second	
	Address:			·	Bedrooms or GPD:		4				1 120	STEVEN A MILLER	
				•	Date:	Monda	ay, February 18	8, 2019			, ,	CERTIFIED PROFESSIONAL	
	Phone #:			•	Evaluator:	Ste	ven Miller, CP	PSSc		()	1 0 3	O SUL SUBILIES	
	Lot #:	_		•		Soil & Enviro	onmental Cons	ulting, Inc.	Signature:	XD.	A Sa	28423	
	Test Hole #:	108	8	•		P.O. Box 1121	ļ		1 ch	7 2000			
Latitu	ide/Longitude:			•		De	Delaware OH 43015			-614.579.	.1164		
	Method:	Pit Auger	r X Tube	Job Number:			19B208			soilcor	isultant@ya	ahoo.com	
					Soil Series:								
Soil I	Profile	Est	imating Soil Satur	ation			Estimati	ng Soil Permea	neability				
		Munsel	ll Color (hue, value,	chroma)							_		
			Redoximorp	ohic Features		Texture			Structure				
lorizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features	
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr		
Bt1	9 to 17	10YR 5/6		20%10YR 5/2	sicl	35	2	2	m	sbk	fi		
Bt2	17 to 41	10YR 5/4		25%10YR 5/2	sic	40	2	2	m	shk	fi		

38

35

sicl

cl

2

5

0

sbk

m

fi

vfi

Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:									
Perched Seasonal Water Table	9	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.									
Apparent Water Table	>50											
Highly Permeable Material	>50											
Bedrock	>50											
Restrictive Layer	44	glacial till										

15%10YR 5/2

10%10Yr 5/2

BC

Cd

41 to 44

44+

10YR 5/4

10RY 4/4

Property A	County: Delaware Township / Sec.: Harlem Address/Location: NW Corner of Harlem Road and Center Village Road Applicant Name: AV Investments Address: Phone #: Lot #: Test Hole #: Itude/Longitude: Test Mole #: Address: 109			d	Position o Pe Sha	n Landform	a: b: c: Mond Ste Soil & Envir	Corn Stubble Till over Rock Backslope 1 to 2% Linear / Linear 4 ay, February 18 even Miller, CP conmental Cons	8, 2019 PSSc ulting, Inc.	Signature:	Ae.	A San	STEVEN A MILLER CERTIFIED PROFESSIONAL SOIL SCIENTIST 28423
Latitu					ī	ob Number	De	P.O. Box 1121 elaware OH 430 19B208		Phone#: <u>p</u>	o-614.579.	.1164 nsultant@ya	ahoo com
	without.		<u> </u>	ioc	,	Soil Series		17B200			0011001	Iourum (e) yo	<u> </u>
Soil 1	Profile		ll Color (hu	l Saturation e, value, chroma) eximorphic Features	T		Estimating Soil Permea			ability Structure			
Horizon	Depth (inches)	Matrix Color	Concentr		:	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 9	10YR 4/3				sicl	30	2	2	m	gr	fr	
Bt1	9 to 20	10YR 5/6		15%10Yr 5/2	2	sicl	35	2	2	m	sbk	fi	
Bt2	20 to 32	10YR 5/4		20%10Yr 5/2	2	sic	40	2	2	m	sbk	fi	
ВС	32 to 39	10YR 5/4		10%10Yr 5/2	2	sicl	38	2	1	m	sbk	fi	
Cd	39+	10YR 4/4		5%10YR 5/2	2	cl	35	5	0		m	vfi	
Limiting Conditions Depth to (in.) Description							Rem	arks / Risk Fac	ctors:				
			perched on glacial	till S	Surface water should be diverted around system. Subsurface ag drainage may be present.								

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>50 >50

39

Highly Permeable Material

Bedrock

Restrictive Layer

Latitude/Longitud	:: Hon: NW Corner and Cente e: AV II	elaware larlem of Harlem Road or Village Road nvestments 110 uger X Tube	Pos	d Use / Vegetation Landform: ition on Landform Percent Slope: Shape of Slope: Bedrooms or GPD: Date: Evaluator: Job Number:	Mond Ste Soil & Envir	Corn Stubble Till over Rock Backslope 1 to 2% Linear / Linear 4 ay, February 18 even Miller, CP commental Cons P.O. Box 1121 claware OH 436 19B208	3, 2019 SSc ulting, Inc.	Signature: Phone#: <u>r</u>	-614.579. soilcon	A January 1164	STEVEN A MILLER CERTIFIED PROFESSIONAL SOIL SOIL SOIL TOTAL ARCHITECTURE OF THE STATE OF THE STA
				Soil Series:							
Soil Profile		Estimating Soil Sat	ue, chroma)			Estimati	ng Soil Permea	•			
Deptl Horizon (inche		Concentration	orphic Features S Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Structure	Type (shape)	Consistence	Other Soil Features
Ap 0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1 9 to 2	10YR 5/4	20%10YR 5/6	20%10YR 5/2	sicl	38	2	2	m	sbk	fi	
Bt2 24 to 3	5 10YR 5/4		25%10Yr 5/2	sic	40	2	2	m	sbk	fi	
BC 35 to 4	0 10YR 5/4		15%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd 40+	10YR 4/4		10%10YR 6/2	cl	35	5	0		m	vfi	
VI 11 G								. /5.1 =			
			Description erched on glacial till	Surface water	r should be di	verted around s		arks / Risk Faction face ag drainage		sent	

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>50

>50

>50

40

Apparent Water Table

Restrictive Layer

Property A	County: Dwnship / Sec.: Address/Location: Dplicant Name: Address: Phone #: Lot #: Test Hole #: Ide/Longitude: Method:	Delaw Harle NW Corner of and Center V AV Inves	em Harlem Road illage Road stments	- - Pos	d Use / Vegetation:	Monda Ste Soil & Envir	Corn Stubble Till over Rock Backslope 1 to 2% Linear / Linear 4 ay, February 18 even Miller, CP commental Cons P.O. Box 1121 claware OH 430 19B208	3, 2019 SSc ulting, Inc.	Signature: Phone#: <u>p</u>	-614.579. soilcon	A Juliant@ya	STEVENA MILLER CERTIFIED PROFESSIONAL SOIL SCIENTIST 28423	
					Soil Series:								
Soil I	Profile	Est	imating Soil Satu	ration			Estimati	ng Soil Permea	ability				
	I	Munsel	ll Color (hue, value			T			Ctt				
Horizon	Depth (inches)	Matrix Color	Concentrations	phic Features Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Structure	Type (shape)	Consistence	Other Soil Features	
Ap	0 to 6	10YR 4/3		_ op	sicl	32	2	2	m	gr	fr	other son reacures	
Btg	6 to 28	10YR 5/2	30%10YR 5/4		sicl	35	2	2	m	sbk	fi		
Bt	28 to 43	10YR 5/3		35%10Yr 5/2	sic	40	2	2	m	sbk	fi		
ВС	43 to 50	10YR 5/4		30%10YR 6/1	sicl	36	2	1	m	sbk	fi		
Cd	50+	10YR 4/4		25%10YR 5/1	cl	35	5	0		m	vfi		
Limiting Conditions Depth to (in.) Description				Description ched on glacial till					arks / Risk Fac				
Perched Seasonal					Surface water should be diverted around system. Subsurface ag drainage may be present.								

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>50 >50

>50

50

Apparent Water Table

Restrictive Layer

	County:	Delaware Lan		d Use / Vegetation:		Corn Stubble					and the same	
То	wnship / Sec.:	Harle	em	•	Landform:		Till over Rock	(
Property A	ddress/Location:	NW Corner of	Harlem Road	Pos	sition on Landform:		Backslope				1	
		and Center V	illage Road	•	Percent Slope:		1 to 2%				1 1	crecpaes \
Ap	plicant Name:	AV Inves	stments		Shape of Slope:		Linear / Linear	r			1 18	Control of the Control
	Address:]	Bedrooms or GPD:		4				1 120	STEVENA MILLER
					Date:	Mond	ay, February 18	8, 2019			` ` `	CERTIFIED PROFESSIONAL
	Phone #:				Evaluator:	Ste	even Miller, CP	SSc		b	1 0 3	O SOL SOLDING
	Lot #:	_				Soil & Envir	onmental Cons	ulting, Inc.	Signature:	XD.	A San	28429
	Test Hole #:	112	112				P.O. Box 1121			L Chi	0 2 0 -	
Latitu	atitude/Longitude:					De	elaware OH 430	015	Phone#: p	-614.579 .	1164	
	Method: Pit Auger X Tube			Job Number:		19B208			soilcon	<u>ısultant@ya</u>	ahoo.com	
					Soil Series:							
Soil P	Profile	Est	imating Soil Satura	ation			Estimati	ng Soil Perme	ability			
		Munsel	ll Color (hue, value,	, chroma)								
			Redoximorp	ohic Features		Texture			Structure			
lorizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 7	10YR 4/3			sicl	32	2	2	m	gr	fr	
Btg	7 to 20	10YR 5/2	25%10YR 5/4		sicl	35	2	2	m	sbk	fi	

42

38

36

sic

sicl

cl

2

2

2

0

sbk

sbk

m

m

fi

fi

vfi

Limiting Conditions	Depth to (in.)	Description Remarks / Risk Factors:											
Perched Seasonal Water Table	7	perched on glacial til	l Surface was	Surface water should be diverted around system. Subsurface ag drainage may be present.									
Apparent Water Table	>50												
Highly Permeable Material	>50												
Bedrock	>50												
Restrictive Layer	50	glacial till											

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

30%10YR 5/2

25%10YR 5/2

20%10YR 5/2

10YR 5/3

10YR 5/4

10YR 4/4

Bt

BC

Cd

20 to 45

45 to 50

50+

Property A	County:	Sec.: Harlem NW Corner of Harlem Road and Center Village Road Name: AV Investments			d Use / Vegetation: Landform: ition on Landform: Percent Slope: Shape of Slope:		Corn Stubble Till over Rock Backslope 1 to 2% Linear / Linear					CRCDGES
	Address:			. 1	Bedrooms or GPD: Date:		4 ay, February 18	3 2019			\ \	CERTIFIED PROFESSIONAL
	Phone #:			•	Evaluator:		ven Miller, CP			f)	1 0 %	SOIL SCIENTIST
	Lot #:	_		•			onmental Cons		Signature:	Sp.	A for	28429
	Test Hole #:	113	3	•		P.O. Box 1121				Luch.	0 2000	
Latitu	ide/Longitude:	itude:				De	laware OH 430)15	Phone#: p	-614.579.		
	Method: Pit Auger X Tube				Job Number:		19B208			soilcon	<u>ısultant@ya</u>	nhoo.com
					Soil Series:							
Soil F	Profile		imating Soil Satura				Estimati	ng Soil Permea	ability			
		11141150		ohic Features		Texture			Structure			
Iorizon	Depth (inches)	Matrix Color	Concentrations			Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 6	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	6 to 14	10YR 5/6		5%10YR 5/3	sicl	35	2	2	m	sbk	fi	

40

38

35

sic

sicl

cl

2

2

sbk

sbk

m

m

fi

fi

vfi

Limiting Conditions	Depth to (in.	.)	Description	Remarks / Risk Factors:								
Perched Seasonal Water Table	14	perc	hed on glacial till	Surface water	r should be div	erted around s	system. Subsurfa	ce ag drainage	may be pres	sent.		
Apparent Water Table	>50											
Highly Permeable Material	>50											
Bedrock	>50											
Restrictive Layer	33		glacial till									

15%10Yr 5/2

10%10yR 5/2

5%10yr 5/2

14 to 30

30 to 33

33+

Bt2

BC

Cd

10YR 5/4

10YR 5/4

10YR 4/4

	County:	Delaw	ara	Lan	d Use / Vegetation:		Corn Stubble					
To	ownship / Sec.:	Harle		·	Landform:		Till over Rock				,	
	Address/Location:	NW Corner of I		Pos	ition on Landform:		Backslope				/	
		and Center Vi	llage Road	-	Percent Slope:		1 to 2%				1 1	crecodes \
Ap	pplicant Name:	AV Inves	tments	•	Shape of Slope:		Linear / Linea	r			15	The second of th
	Address:			I	Bedrooms or GPD:		4				1 120	STEVENA MILLER
					Date:	Monda	ay, February 1	8, 2019		,	```	CERTIFIED PROFESSIONAL
	Phone #:			_	Evaluator:	Ste	ven Miller, CF	SSc		V	103	0
	Lot #:	_		_		Soil & Enviro	onmental Cons	ulting, Inc.	Signature:	XIP	A Lan	28423
	Test Hole #:	114	1				P.O. Box 1121				0 2 0	
Latitu	ide/Longitude:					De	laware OH 430	015	Phone#: I	o-614.579.		
	Method:	Pit Auger	X Tube		Job Number:		19B208			soilcor	<u>isultant@ya</u>	ahoo.com
					Soil Series:							
Soil I	Profile	Feti	mating Soil Satur	ation			Estimati	ng Soil Perme	ahility			
5011 1	Tone		l Color (hue, value,				Littinati	ng son rerme	ability			
		iviunsei		ohic Features		Texture			Structure			
lorizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 7	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	7 to 16	10YR 5/4		30%10YR 5/2	sicl	35	2	2	m	sbk	fi	

Bti	7 10 10	101103/1		3070101103/2	5101	33	2	2	111	SUK	11	
Bt2	16 to 38	10YR 5/4		20%10YR 5/2	sic	40	2	2	m	sbk	fi	
ВС	38 to 42	10YR 5/4		15%10YR 5/2	sicl	35	2	1	m	sbk	fi	
Cd	42+	10YR 4/4		10%10Y R5/2	cl	33	5	0		m	vfi	
Limiting	Conditions	Depth to (in.)		Description								
Perched Seasonal	Water Table	7	pero	ched on glacial till	Surface water	should be div	erted around s	system. Subsurfa	ce ag drainage	may be pres	sent.	
Apparent Water T	able	>50										

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>50 >50

42

Highly Permeable Material

Bedrock

Restrictive Layer

	County:		Harlem			/ Vegetation: Corn Stubble						
	wnship / Sec.:				Landform:		Till over Rock				1	1-1
Property A	.ddress/Location:	NW Corner of I		Pos	ition on Landform:		Backslope				1 1	
		and Center Vi	illage Road	ī	Percent Slope:		1 to 2%				1 1	orcpacs .
Ap	plicant Name:	AV Inves	stments	ī	Shape of Slope:		Linear / Linear	r			1 15	Secretary of the second
	Address:			. 1	Bedrooms or GPD:		4				1 1	STEVEN A MILLER
					Date:	Mond	ay, February 18	8, 2019		,	1	CERTIFIED PROFESSIONAL
	Phone #:			ī	Evaluator:	Ste	ven Miller, CP	SSc		V	103	0
	Lot #:	_				Soil & Envir	onmental Cons	ulting, Inc.	Signature:	XD.	A San	28423
	Test Hole #:	115	5				P.O. Box 1121			wh		
Latitu	de/Longitude:					De	laware OH 430	015	Phone#: p	-614.579.		
	Method:	Pit Auger	X Tube	•	Job Number:		19B208			soilcon	sultant@ya	ahoo.com
					Soil Series:							
Soil P	Profile		imating Soil Satur				Estimatir	ng Soil Permea	bility			
		Munsel	l Color (hue, value,									
			Redoximorp	ohic Features		Texture			Structure			
	Depth	Matrix				Approx.	Approx. %			Type		
Horizon	(inches)	Color	Concentrations	Depletions	Class	% Clay	Fragments	Grade	Size	(shape)	Consistence	Other Soil Features
Ap	0 to 11	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	11 to 20	10YR 5/6		25%10Yr 5/2	sicl	36	2	2	m	sbk	fi	
Bt2	20 to 28	10YR 5/4		30%10Yr 5/2	sic	40	2	2	m	sbk	fi	
ВС	28t o 32	10YR 5/4		25%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	32	10YR 4/4		20%10YR 5/2	cl	35	5	0		m	vfi	
Limiting (onditions Depth to (in.) Description							Rem	arks / Risk Fac	tors:		

Surface water should be diverted around system. Subsurface ag drainage may be present.

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

perched on glacial till

glacial till

11

>50

>50

>50 32

Perched Seasonal Water Table

Apparent Water Table

Restrictive Layer

	County:	Delaw			d Use / Vegetation:		Corn Stubble					
To	ownship / Sec.:	Harle	em	-	Landform:		Till over Rock	·			,	
	Address/Location:	NW Corner of	Harlem Road	Pos	ition on Landform:		Backslope				1	
		and Center V	illage Road	•	Percent Slope:		1 to 2%	_			1 1	proposs \
Ap	pplicant Name:	AV Inves	stments	•	Shape of Slope:		Linear / Linear				1 18	Control of the second
	Address:			1	Bedrooms or GPD:		4	<u> </u>			1	STEVENA MILLER
				•	Date:	Monda	ay, February 18	3, 2019			1	CERTIFIED PROFESSIONAL
	Phone #:			•	Evaluator:	Ste	ven Miller, CP	SSc		1)	103	O SUIT SUITE ITES
	Lot #:	_		•		Soil & Enviro	onmental Cons	ulting, Inc.	Signature:	XO.	4 Sa.	28423
	Test Hole #:	110	6	•	•		P.O. Box 1121			1 can	7 2000	
Latitu	Latitude/Longitude: Mathod: Pit Auger V Tube			•		De	laware OH 430	015	Phone#: p	-614.579.	1164	
	Method: Pit Auger X Tube				Job Number:		19B208			soilcon	sultant@ya	ahoo.com
	Method. Fit Auget A 1 uoc				Soil Series:			_				
Soil l	Profile		imating Soil Satur				Estimatir	ng Soil Permea	bility			
		Munsel	l Color (hue, value,									
			Redoximorp	ohic Features		Texture			Structure			
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 10	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	10 to 24	10YR 5/4		25%10YR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	24 to 32	10YR 5/4		30%10YR 5/2	sicl	38	2	2	m	sbk	fi	

36

35

sicl

cl

2

5

0

sbk

m

fi

vfi

Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:										
Perched Seasonal Water Table	10	perched on glacial till	ial till Surface water should be diverted around system. Subsurface ag drainage may be present.										
Apparent Water Table													
Highly Permeable Material	>50												
Bedrock	>50												
Restrictive Layer	35	glacial till											

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

25%10YR 5/2

20%10YR 5/2

BC

Cd

32 to 35

35+

10YR 5/4

10YR 4/4

		D.I.			177 /77 /		0 0 111					
_	County:	Delaw		Lan	d Use / Vegetation:		Corn Stubble					1
To	wnship / Sec.:	Harle	em	i	Landform:		Till over Rock	ζ			/	
Property A	ddress/Location:	NW Corner of I	Harlem Road	Pos	sition on Landform:		Backslope				1	
		and Center Vi	illage Road		Percent Slope:		1 to 2%				! 1	crecpaes !
App	plicant Name:	AV Inves	stments	•	Shape of Slope:		Linear / Linea	r			1 12	and the second
	Address:				Bedrooms or GPD:		4				1 120	STEVENA MILLER
					Date:	Monda	ay, February 1	8, 2019			', ',	CERTIFIED PROFESSIONAL
	Phone #:				Evaluator:		ven Miller, CF			l)	4 0 5	O SOIL SCILLING
	Lot #:	_		ı	Soil & Enviro	onmental Cons	sulting, Inc.	Signature:	X10	1 la .	28424	
	Test Hole #:	117	7	•	•		P.O. Box 1121		C	XIII.	V Jun	
Latitue	de/Longitude:			•	•	Delaware OH 43015			Phone#: p	-614.579.	1164	
	Method:	Pit Auger	X Tube	•	Job Number:	19B208					sultant@ya	ahoo.com
					Soil Series:		-,					
Soil P	rofile	Esti	imating Soil Satura	ation			Estimati	ng Soil Permea	bility			
		Munsel	l Color (hue, value,	chroma)	1							
			Redoximorp	hic Features		Texture			Structure			
	Depth	Matrix				Approx.	Approx. %			Type	1	
Horizon	(inches)	Color	Concentrations	Depletions	Class	% Clay	Fragments	Grade	Size	(shape)	Consistence	Other Soil Features
Ap	0 to 6	10YR 4/3			sicl	30	2	2	m	gr	fr	
									1	1		

Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 6	10YR 4/3			sicl	30	2	2	m	gr	fr	
Btg	6 to 19	10YR 5/2	30%10YR 5/4		sicl	35	2	2	m	sbk	fi	
Bt	19 to 42	10YR 5/4		35%10YR 5/2	sic	40	2	2	m	sbk	fi	
ВС	42 to 50	10YR 5/4		30%10YR 5/2	sicl	38	2	1	m	sbk	fi	
Cd	50+	10YR 4/4		20%10YR 5/2	cl	35	5	0		m	vfi	

Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	6	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	50	glacial till	

	County:	Delaw	are	Lan	d Use / Vegetation:		Corn Stubble					Martin and Martin and Albertan
To	wnship / Sec.:	Harle	em		Landform:		Till over Rock					
Property A	ddress/Location:	NW Corner of l	Harlem Road	Pos	ition on Landform:		Backslope				/ /	
		and Center Vi	illage Road		Percent Slope:		1 to 2%				<i>i i</i>	crecpaes \
Ap	plicant Name:	AV Inves	stments		Shape of Slope:		Linear / Linear	r			18	
	Address:			1	Bedrooms or GPD:		4				1 120	STEVENA MILLER
					Date:	Monda	y, February 18	3, 2019			' '	CERTIFIED PROFESSIONAL
	Phone #:				Evaluator:	Ste	ven Miller, CP	SSc		l)	103	O SUL SUBILIS
	Lot #:	_			•	Soil & Enviro	onmental Cons	ulting, Inc.	Signature:	XO.	A Son	28423
	Test Hole #:	118	3		•		P.O. Box 1121			Luch	7 2000	
Latitu	de/Longitude:				•	De	laware OH 430	015	Phone#: p	-614.579.	1164	
	Method:	Pit Auger	X Tube		Job Number:		19B208			soilcon	sultant@ya	ahoo.com
					Soil Series:							
Soil P	Profile	Esti	imating Soil Satura	ation			Estimati	ng Soil Permea	bility			
		Munsel	l Color (hue, value,	chroma)								
			Redoximorp	ohic Features		Texture			Structure			
Iorizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
10112011	(iliches)	Coloi	Concentrations	Depictions	Class	70 Clay	Fragments	Grade	Size	(shape)	Consistence	Other Son Features
Ap	0 to 6	10YR 4/3			sicl	30	2	2	m	gr	fr	
Btg	6 to 21	10YR 5/2	20%10YR 5/4		sicl	35	2	2	m	sbk	fi	

40

38

35

sic

sicl

cl

2

2

2

0

sbk

sbk

m

m

fi

fi

vfi

Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	6	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Laver	48	glacial till	

40%10YR 5/2

30%10YR 5/1

20%10YR 6/2

21 to 44

44 to 48

48+

Bt

BC

Cd

10YR 5/3

10YR 5/4

10YR 4/4

Property A	Phone #: Lot #: Test Hole #: Latitude/Longitude: Method:			Evaluator: Soil & Er Job Number:			Till over Rock Backslope 1 to 2%			-614.579.		STEVEN A MILLER CERTIFIED PROFESSIONAL SOIL SCIENTIST 2842 64 Itant@yahoo.com	
	wiethou.	Tit	1 A Tube		Soil Series:		17B200	_		0011001	lounal new ye	<u> </u>	
Soil 1	Test Hole #:		timating Soil Satur			Estimatir	ng Soil Perme	ability					
		Withise		phic Features		Texture		Structure					
Horizon			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features	
Ap	0 to 8	10YR 4/3			sicl	32	2	2	m	gr	fr		
Btg	8 to 15	10YR 5/2	30%10YR 5/4		sicl	35	2	2	m	sbk	fi		
Bt	20 to 24	10YR 5/4		35%10YR 5/2	sic	40	2	2	m	sbk	fi		
BC	24 to 28	10YR 5/4		40%10YR 5/2	sicl	38	2	1	m	sbk	fi		
Cd	28+	10YR 4/4		25%10YR 6/2	cl	35	5	0		m	vfi		
_	Conditions	Depth to (i		Description	C£ :	l 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			arks / Risk Fac				
Perched Seasonal Water Table 8 per Apparent Water Table >50			ched on glacial till	Surface water	r snould be di	verted around s	ystem. Subsui	rface ag drainage	may be pre	sent.			
Highly Permeable	e Material	>50											

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>50 >50

28

Bedrock

Restrictive Layer

	County:ownship / Sec.:ddress/Location:	Delaw Harle NW Corner of and Center V	em Harlem Road	•	d Use / Vegetation: Landform: ition on Landform: Percent Slope:		Corn Stubble Till over Rock Backslope 1 to 2%	:			1	cacpaes		
Ap	plicant Name:	AV Inves	stments	•	Shape of Slope:		Linear / Linear	<u> </u>				The second second		
	Address:			. 1	Bedrooms or GPD: Date:		4 ay, February 18	2019			/ /	STEVEN A MILLER CERTIFIED PROFESSIONAL		
	Phone #:			•	Evaluator:		even Miller, CP			f)	108	SOIL SCIENTIST		
	Lot #:	_			•	Soil & Envir	onmental Cons	ulting, Inc.	Signature:	No.	A fan	28423		
	Test Hole #:	120	0	•			P.O. Box 1121							
Latitu	ide/Longitude:					De	elaware OH 430)15	Phone#: p	-614.579.				
	Method:	Pit Auger	X Tube		Job Number: Soil Series:		19B208			SOIICON	sultant@ya	anoo.com		
			Son Senes.											
Soil I	Profile	Est	imating Soil Satur	ation			Estimatir	ng Soil Perme	ability					
		Munsell Color (hue, va												
			Redoximorp	ohic Features		Texture	1		Structure					
Iorizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features		
Ap	0 to 8	10YR 4/3			sicl	30	2	2	m	gr	fr			
Btg	8 to 20	10YR 5/2	20%10YR 5/4		sicl	35	2	2	m	sbk	fi			
Bt	20 to 35	10YR 5/4		40%10YR 5/2	sic	40	2	2	m	sbk	fi			
ВС	35 to 41	10YR 5/4		30%10YR 5/2	sicl	38	2	1	m	sbk	fi			
Cd	41+	10YR 4/4		20%10YR 6/2	cl	35	5	0		m	vfi			
T ::	Conditio	D-m4l-4 C	m)				n.	arks / Risk Fac	ot a way					
	Conditions Water Table	Depth to (i		Description	Surface water	should be div	verted around s				sent			
ed Seasonal	Water Table							vstem. Subsur	m. Subsurface ag drainage may be present.					

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>50

>50 >50

41

Apparent Water Table Highly Permeable Material

Restrictive Layer

Bedrock

Property A	Phone #:		em Harlem Road illage Road stments	Pos	d Use / Vegetation:	Monda Ste	Corn Stubble Till over Rock Backslope 1 to 2% Linear / Linear 4 ay, February 18 ven Miller, CP	3, 2019 SSc	Signature:	Ja	10	STEVENA MILLER CERTIFIED PROFESSIONAL SOIL SCIENTIST 28422
*	Test Hole #:	121	1				P.O. Box 1121		-	C14.570	H Xh.	2042
Latitu	Method:	Pit Auger	X Tube	•	Job Number: 19B208 Soil Series:			Phone#: 1		isultant@ya	ahoo.com	
Soil F	Profile		imating Soil Satura 1 Color (hue, value,		Estimating Soil Permea			ability				
		iviunsei		phic Features		Texture			Structure			
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 21	10YR 5/3	30%10Yr 5/4	25%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	21 to 37	10YR 5/4		20%10yR 5/1	sic	40	2	2	m	sbk	fi	
ВС	37 to 40	10YR 5/4		15%10YR 5/1	sicl	38	5	1	m	sbk	fi	
Cd	40+	10YR 4/4		15%10YR 6/1	cl	35	5	0		m	vfi	
						_		_				

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Description

perched on glacial till

glacial till

Depth to (in.)

>50

>50

>50

40

Limiting Conditions

Perched Seasonal Water Table

Apparent Water Table

Restrictive Layer

Highly Permeable Material

Remarks / Risk Factors:

Surface water should be diverted around system. Subsurface ag drainage may be present.

Property A	County: Downship / Sec.: Address/Location: Poplicant Name: Address: Phone #: Lot #: Test Hole #: ide/Longitude: Method:	Delaw Harle NW Corner of and Center V AV Inves	em Harlem Road illage Road stments	Posi	d Use / Vegetation:	Monda Ste Soil & Enviro De	Corn Stubble Till over Rock Backslope 1 to 2% Linear / Linear 4 ay, February 18 ven Miller, CP onmental Cons P.O. Box 1121 laware OH 430 19B208	3, 2019 SSc ulting, Inc.	Signature: Phone#: <u>p</u>	-614.579. soilcon	J.1164 nsultant@ya	STEVENA MILLER CERTIFIED PROFESSIONAL SOIL SCIENTIST 28423
					Soil Series:							
Soil I	Profile		imating Soil Satur				Estimatir	ng Soil Permea	ability			
			Redoximor	phic Features Texture				Structure	•			
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 18	10YR 5/ 4		15%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	18 to 27	10YR 5/4		25%10YR 5/2	sic	40	2	2	m	sbk	fi	
ВС	27 to 30	10YR 5/4		10%10yR 5/1	sicl	38	5	1	m	sbk	fi	
Cd	30+	10YR 4/4 10%10yR 5			cl	36	5	0		m	vfi	
Limiting Conditions Depth to (in.)				Description Remarks / Risk Factors:								
Perched Seasonal	Water Table	9	pero	ched on glacial till	Surface water	should be div	erted around s	ystem. Subsur	face ag drainage	may be pre	esent.	

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>50 >50

>50 30

Apparent Water Table

Restrictive Layer

	County:	Delaw	are	Land	d Use / Vegetation:		Corn Stubble					and the second
To	ownship / Sec.:	Harle	em	•	Landform:		Till over Rock					
Property A	.ddress/Location:	NW Corner of l	Harlem Road	Pos	ition on Landform:		Backslope				· / /	
		and Center Vi	illage Road	•	Percent Slope:		2 to3 %				<i>i i</i>	crecpaes
Ap	plicant Name:	AV Inves	stments		Shape of Slope:		Linear / Linear	r			1 12	
	Address:			I	Bedrooms or GPD:		4				1 120	STEVENA MILLER
					Date:	Mond	ay, February 18	8, 2019			```	CERTIFIED PROFESSIONAL
	Phone #:				Evaluator:	Ste	even Miller, CP	SSc		b	103	O SUL SURIIIS
	Lot #:	_				Soil & Envir	onmental Cons	ulting, Inc.	Signature:	XD.	A San	28429
	Test Hole #:	123	3				P.O. Box 1121			L. Mi	7 20-0	
Latitu	de/Longitude:					De	elaware OH 430	015	Phone#: r	-614.579.	.1164	
	Method:	Pit Auger	X Tube		Job Number:		19B208		_	soilcor	isultant@ya	ahoo.com
					Soil Series:			_				
Soil P	Profile	Esti	imating Soil Satura	ation			Estimati	ng Soil Perme	ability			
		Munsel	l Color (hue, value,	, chroma)								
			Redoximorp	ohic Features		Texture			Structure			
lorizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 16	10YR 5/6		10%10vR 5/2	sicl	35	2	2	m	shk	fi	

40

2

sbk

m

fi

Apparent Water T Highly Permeable		>50 >50											
Perched Seasonal		9	pero	ched on glacial till	Surface water	should be div	erted around s	system. Subsurfa	ce ag drainage	may be pre	sent.		
Limiting (Limiting Conditions Depth to (in.) Descrip					Description Remarks / Risk Factors:							
Cd	29+	10YR 4/4		10%10Yr 5/2	cl	36	5	0		m	vfi		
ВС	25 to 29	10YR 5/4		15%10YR 5/2	sicl	38	5	1	m	sbk	fi		

sic

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

20%10YR 5/2

10YR 5/4

>50 29

16 to 25

Bt2

Bedrock

Restrictive Layer

	County:	Delaw	are	Lan	d Use / Vegetation:		Corn Stubble					and the second
To	ownship / Sec.:	Harle	em	•	Landform:		Till over Rock	ζ				
Property A	ddress/Location:	NW Corner of l	Harlem Road	Pos	sition on Landform:		Backslope				/ /	
		and Center Vi	illage Road	•	Percent Slope:		2 to3 %				<i>i i</i>	crecpaes
Ap	plicant Name:	AV Inves	stments		Shape of Slope:		Linear / Linea	r			1 12	
	Address:				Bedrooms or GPD:		4				1 120	STEVENA MILLER
				•	Date:	Monda	ay, February 1	8, 2019			', '	CERTIFIED PROFESSIONAL
	Phone #:				Evaluator:	Ste	ven Miller, CF	PSSc		b	103	O SUIT SUITE ITEM
	Lot #:	_		•		Soil & Enviro	onmental Cons	sulting, Inc.	Signature:	XD.	A for	28423
	Test Hole #:	124	4				P.O. Box 1121	1		Luch	7 2000	
Latitu	de/Longitude:					De	laware OH 430	015	Phone#:	p-614.579.	.1164	
	Method:	Pit Auger	X Tube	•	Job Number:		19B208			<u>soilcor</u>	nsultant@ya	ahoo.com
					Soil Series:							
Soil P	Profile	Esti	imating Soil Satur	ation			Estimati	ng Soil Perme	ability			
		Munsel	l Color (hue, value,	, chroma)							_	
			Redoximorp	ohic Features		Texture			Structure			
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
D.1	0 . 16	10770 516			. ,	2.5				1.1	~	

		Munsel	Munsell Color (hue, value, chroma)									
			Redoximorp	hic Features		Texture			Structure			
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 16	10YR 5/6		15%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	16 to 26	10YR 5/4		25%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	26 to 30	10YR 5/4		20%10YR 5/2	sicl	38	5	1	m	sbk	fi	
Cd	30+	10YR 4/4		15%10YR 5/2	cl	36	5	0		m	vfi	

Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	9	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	30	glacial till	

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Landforms
Upland*
Terrace
Flood Plain
Lake Pain
Beach Ridge
*Includes glacial till
plain and end moraine

Position on Landform				
Depression				
Flat				
Knoll				
Crest				
Hillslope				
Footslope				

Shape of Slope
Convex
Concave
Linear
Complex

	Horizon Nomenclature					
	Master Horizons		Horizon Suffixes	Horizon Modifiers		
О	Predominantly organic matter (litter &		Highly decomposed organic matter			
	humus)	b Buried genetic horizon		Numerical Prefixes: Used to denote		
A	Mineral, organic matter (humus) accumulation, loss of Fe, Al, clay		Densic layer (physically root restrictive)	lithologic discontinuities.		
			Moderately decomposed organic matter	7		
Е	Mineral, loss of Si, Fe, Al, clay, organic		Strong gley	7		
	matter	i	Slightly decomposed organic matter	Numerical Suffixes: Used to denote		
В	Subsurface accumulation of clay, Fe, Al, Si,	p	Plow layer or artificial disturbance	subdivisions within a master		
	humus; sesquioxides; loss of CaCo ₃ ;	r	Weathered or soft bedrock	horizon.		
	subsurface soil structure		Illuvial accumulation of silicate clay	7		
С		w	Weak color or structure within B	7		
	Little or no pedogenic alteration,	X	Fragipan characteristics	7		
	unconsoilidated earthy material, soft bedrock		•	_		
R	Hard bedrock					

	Soil	Texture			
Texture Class Abbreviati	Textural Class Modifiers				
Course Sand cos		Gravel	GR		
Sand s		Fine G	FGR		
Fine Sand	fs	Mediu	MGR		
Very Fine Sand	vfs	Coarse	CGR		
Loamy Coarse Sand	lcos	Very G	Very Gravelly		
Loamy Sand	ls	Extrem	nely Gravelly	XGR	
Loamy Fine Sand	lfs	Cobbly	/	СВ	
Loamy Very Fine Sand	lvfs	Very C	Cobbly	VCB	
Coarse Sandy Loam	cosl	Extrem	nely Cobbly	XCB	
Sandy Loam	sl	Stony		ST	
Fine Sandy Loam	fsl	Very S	tony	VST	
Very Fine Sandy Loam	vfsl	Extrem	nely Stony	XST	
Loam	l	Boulde	ery	BY	
Silt Loam	sil	Very B	Bouldery	VBY	
Silt	si	Extrem	nely Bouldery	XBY	
Sandy Clay Loam	scl	Channe	ery	CN	
Clay Loam	cl	Very C	Channery	VCN	
Silty Clay Loam	sicl	Extrem	nely Channery	XCN	
Sandy Clay	sc	Flaggy		FL	
Silty Clay	sic	Very F	laggy	VFL	
Clay c		Extrem	nely Flaggy	XFL	
*Estimate approximate cl	lay perc	ntage wi	ithin 5 percent		

Soil Structure						
Grade		Size		Type (Shape)		
Structureless	0	Very Fine	vf	Granular	gr	
Weak	1	Fine	f	Angular Blocky	abk	
Moderate	2	Medium	m	Subangular Blocky	sbk	
Strong	3	Coarse	co	Platy	pl	
		Very Coarse	vc	Prismatic	pr	
		Extr. Coarse	ec	Columnar	cpr	
		Very Thin*	vn	Single Grain	sg	
		Thin*	tn	Massive	m	
		Thick*	tk	Cloddy	CDY	
		Very Thick*	vk			

^{*} The sizes Very Thin, Thin, Thick, and Very Thick, are used when describing platy structure only. Substitute thin for fine, and thick for coarse when describing platy structure.

Moist Consistence				
Loose	1			
Very Friable	vfr			
Friable	fr			
Firm	fi			
Very Firm	vfi			
Extremely Firm	efi			

For a more detailed explanation on describing and sampling soils, please refer to the "Field Book for Describing and Sampling Soils" Schoeneberger, P.J., Wysocki, D.A., Benham, E.C., and Broderson, W.D. (editors) 2002. Field book for describing and sampling soils, version 2.0. Natural Resources Conservation Service, USDA, National Soil Survey Center, Lincoln, NE.