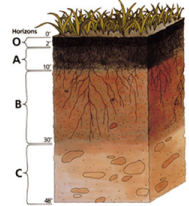


Soil and Environmental
Consulting Services, Inc.



Friday, June 24, 2022

Bruner Land Company
c/o Lori Bruner
brunerland@hotmail.com

Re: Soil investigation for on-site septic disposal for the lot splits south of 3788 County Road 114, Harmony Township, Morrow County, Ohio

Enclosed you will find the requested detailed soil for the lot splits south of 3788 County Road 114, Harmony Township, Morrow 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.

A handwritten signature in black ink, appearing to read 'Steven Miller'.

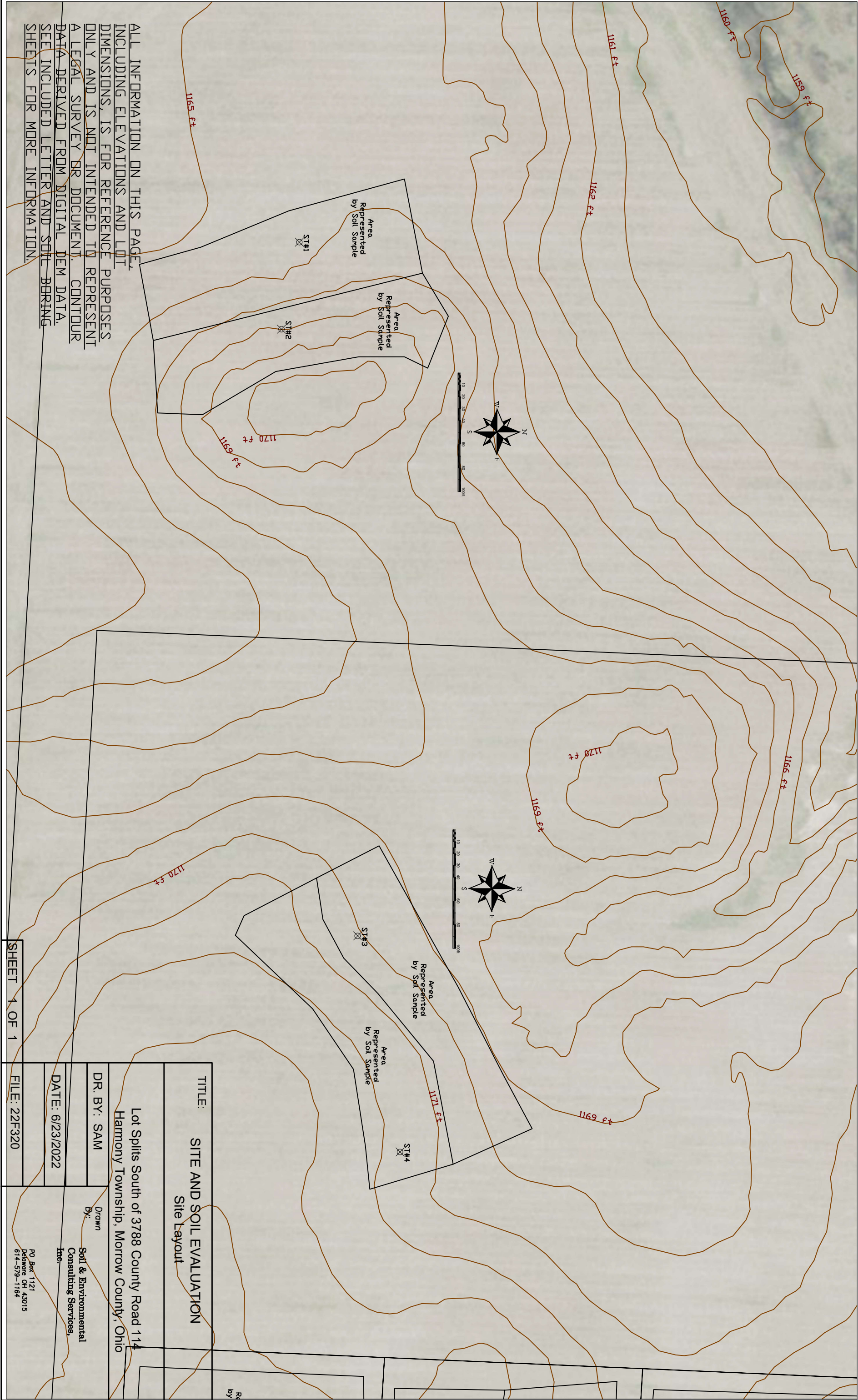
Steven Miller, CPSS



ALL INFORMATION ON THIS PAGE, INCLUDING ELEVATIONS AND LOT DIMENSIONS, IS FOR REFERENCE PURPOSES ONLY AND IS NOT INTENDED TO REPRESENT A LEGAL SURVEY OR DOCUMENT. CONTOUR DATA DERIVED FROM DIGITAL DEM DATA. SEE INCLUDED LETTER AND SOIL BORING SHEETS FOR MORE INFORMATION.

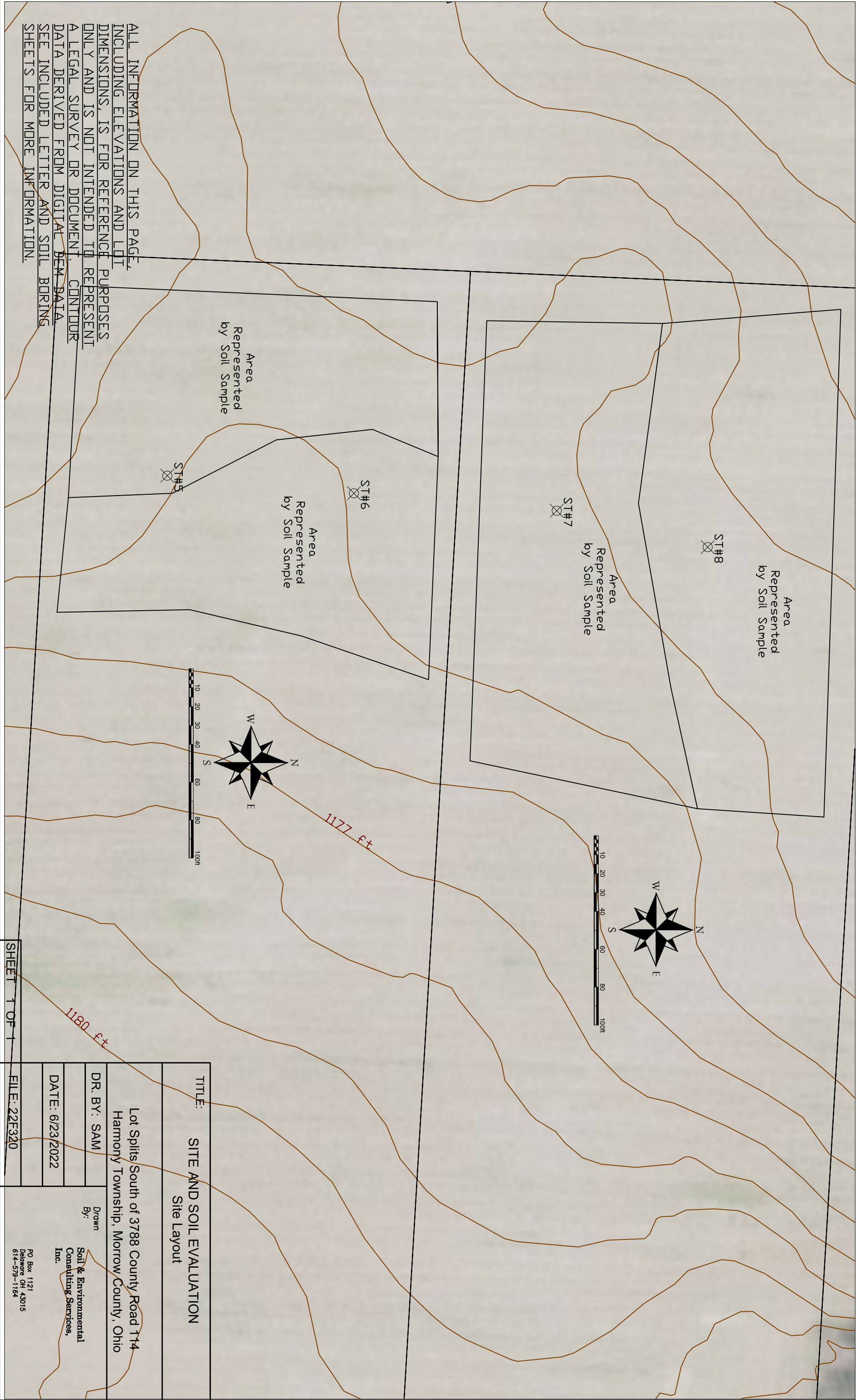
SHEET 1 OF 1

TITLE: SITE AND SOIL EVALUATION Site Layout	
Lot 3788 South of 3788 County Road 114 Hiram Township, Morrow County, Ohio	
DR/ BY: SAM	Drawn By: Soil & Environmental Consulting Services, Inc.
DATE: 6/23/2022	PO Box 1121 Delaware, OH 43015 614-579-4164
FILE: 22F320	



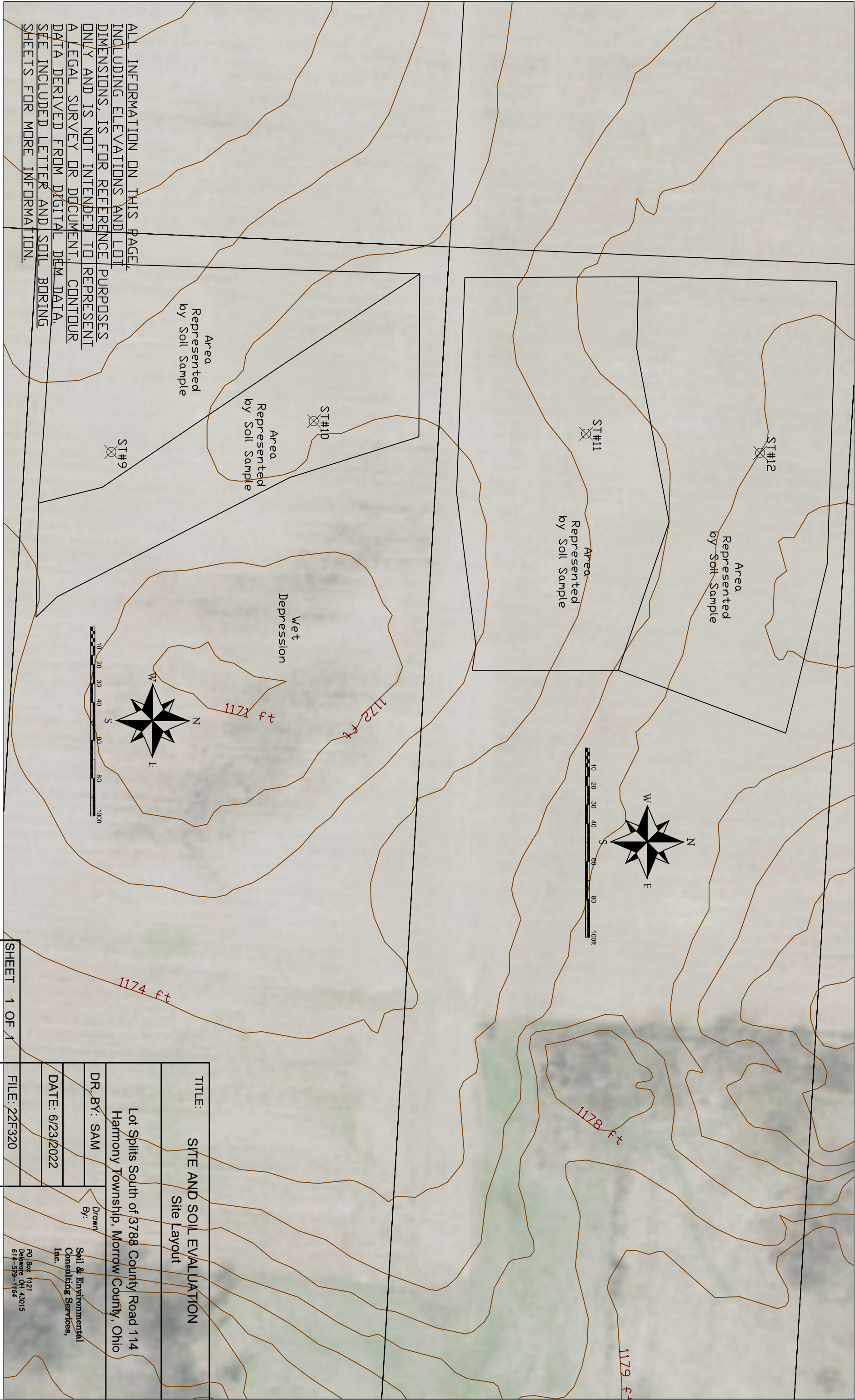
ALL INFORMATION ON THIS PAGE, INCLUDING ELEVATIONS AND LOT DIMENSIONS, IS FOR REFERENCE PURPOSES ONLY AND IS NOT INTENDED TO REPRESENT A LEGAL SURVEY OR DOCUMENT. CONTOUR DATA DERIVED FROM DIGITAL DEM DATA. SEE INCLUDED LETTER AND SOIL BORING SHEETS FOR MORE INFORMATION.

TITLE: SITE AND SOIL EVALUATION Site Layout	
Lot Splits South of 3788 County Road 114 Harmony Township, Morrow County, Ohio	
DR. BY: SAM	Drawn By:
DATE: 6/23/2022	Soil & Environmental Consulting Services, Inc.
FILE: 22F320	PO Box 1121 Delaware OH 43015 614-579-1164



ALL INFORMATION ON THIS PAGE, INCLUDING ELEVATIONS AND LOT DIMENSIONS, IS FOR REFERENCE PURPOSES ONLY AND IS NOT INTENDED TO REPRESENT A LEGAL SURVEY OR DOCUMENT. CONTOUR DATA DERIVED FROM DIGITAL DEM DATA. SEE INCLUDED LETTER AND SOIL BORING SHEETS FOR MORE INFORMATION.

TITLE: SITE AND SOIL EVALUATION Site Layout	
Lot Splits South of 3788 County Road 114 Harmony Township, Morrow County, Ohio	
DR. BY: SAM	Drawn By: Soil & Environmental Consulting Services, Inc. PO Box 1121 Delaware OH 43015 614-579-1164
DATE: 6/23/2022	
FILE: 22F320	



ALL INFORMATION ON THIS PAGE, INCLUDING ELEVATIONS AND LOT DIMENSIONS, IS FOR REFERENCE PURPOSES ONLY AND IS NOT INTENDED TO REPRESENT A LEGAL SURVEY OR DOCUMENT. CONTOUR DATA DERIVED FROM DIGITAL DEM DATA. SEE INCLUDED LETTER AND SOIL BORING SHEETS FOR MORE INFORMATION.

SHEET 1 OF 1

TITLE: SITE AND SOIL EVALUATION	
Site Layout	
Lot Splits South of 3788 County Road 114 Harmony Township, Morrow County, Ohio	
DR. BY: SAM	Drawn By: Soil & Environmental Consulting Services, Inc. PO Box 1121 Delaware OH 43015 614-579-1164
DATE: 6/23/2022	
FILE: 22F320	



TITLE: SITE AND SOIL EVALUATION Site Layout	
Lot Splits South of 3788 County Road 114 Harmony Township, Morrow County, Ohio	
DR. BY: SAM	Drawn By:
DATE: 6/23/2022	Soil & Environmental Consulting Services, Inc.
FILE: 22F320	PO Box 1121 Delaware OH 43015 614-579-1164

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 1
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sil	22	2	1	m	gr	fr	
Bt1	9 to 22	10YR 5/4		25%10yR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	22 to 30	10YR 5/4		30%10YR 5/2	sicl	35	2	2	m	sbk	fi	
BC	30 to 33	10YR 5/4		25%10YR 5/2	sicl	32	2	1	m	sbk	fi	
Cd	33+	10YR 4/4		20%10YR 5/2	sil	30	5	0		m	vfi	
Limiting Conditions												
Limiting Conditions		Depth (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		>60										
Highly Permeable Material		>60										
Bedrock		>60										
Restrictive Layer		33		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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 2
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal													
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features	
		Munsell Color (hue, value, chroma)		Matrix Color	Redoximorphic Features		Texture			Structure			Consistence
Horizon	Depth (inches)					Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	
Ap	0 to 9	10YR 4/3					sil	22	2	1	m	gr	fr
Bt1	9 to 25	10YR 5/4				15%10YR 5/2	sicl	34	2	2	m	sbk	fi
Bt2	25 to 32	10YR 5/4				20%10YR 5/2	sicl	36	2	2	m	sbk	fi
BC	32 to 36	10YR 5/4				30%10YR 5/2	sicl	34	2	1	m	sbk	fi
Cd	36+	10YR 4/4				25%10YR 5/2	sil	32	5	0		m	vfi

Limiting Conditions	Depth (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	>60		
Highly Permeable Material	>60		
Bedrock	>60		
Restrictive Layer	36	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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 3
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal													
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features	
		Munsell Color (hue, value, chroma)		Matrix Color	Redoximorphic Features		Texture			Structure			Consistence
Horizon	Depth (inches)					Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	
Ap	0 to 8	10YR 4/3					sil	20	2	1	m	gr	fr
Bt1	8 to 15	10YR 5/4				20%10yR 5/2	sicl	32	2	2	m	sbk	fi
Bt2	15 to 21	10YR 5/4				25%10YR 5/2	sicl	35	2	2	m	sbk	fi
BC	21 to 24	10YR 5/4				20%10YR 5/2	sicl	32	2	1	m	sbk	fi
Cd	24+	10YR 4/4				15%10YR 5/2	sil	30	5	0		m	vfi

Limiting Conditions	Depth (in)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	8	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>60		
Highly Permeable Material	>60		
Bedrock	>60		
Restrictive Layer	24	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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 4
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 8	10YR 4/3			sil	22	2	1	m	gr	fr	
Bt1	8 to 16	10YR 5/4		15%10YR 5/2	sicl	34	2	2	m	sbk	fi	
Bt2	16 to 20	10YR 5/4		20%10YR 5/2	sicl	36	2	2	m	sbk	fi	
BC	20 to 22	10YR 5/4		25%10YR 5/2	sicl	34	2	1	m	sbk	fi	
Cd	22+	10YR 4/4		30%10YR 5/1	sil	32	5	0		m	vfi	

Limiting Conditions	Depth (in)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	8	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>60		
Highly Permeable Material	>60		
Bedrock	>60		
Restrictive Layer	22	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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 5
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sil	22	2	1	m	gr	fr	
Bt1	9 to 19	10YR 5/4		20%10YR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	19 to 30	10YR 5/4		25%10YR 5/2	sicl	37	2	2	m	sbk	fi	
BC	30 to 32	10YR 5/4		30%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	32+	10YR 4/4		25%10YR 5/2	sil	34	5	0		m	vfi	
Limiting Conditions		Depth (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		>60										
Highly Permeable Material		>60										
Bedrock		>60										
Restrictive Layer		32	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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 6
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)		Redoximorphic Features	Texture			Structure			Consistence	
Horizon	Depth (inches)	Matrix Color	Concentrations		Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size		Type (shape)
Ap	0 to 9	10YR 4/3			sil	22	2	1	m	gr	fr	
Bt1	9 to 18	10YR 5/4		15%10YR 5/2	sicl	34	2	2	m	sbk	fi	
Bt2	18 to 26	10YR 5/4		20%10YR 5/2	sicl	36	2	2	m	sbk	fi	
BC	26 to 29	10YR 5/4		25%10YR 5/2	sicl	35	2	1	m	sbk	fi	
Cd	29+	10YR 4/4		20%10YR 5/2	sil	34	5	0		m	vfi	

Limiting Conditions	Depth (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	>60		
Highly Permeable Material	>60		
Bedrock	>60		
Restrictive Layer	29	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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 7
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 10	10YR 4/3			sil	22	2	1	m	gr	fr	
Bt1	10 to 17	10YR 5/4		20%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	17 to 28	10YR 5/4		25%10RY 5/2	sicl	36	2	2	m	sbk	fi	
BC	28 to 30	10YR 5/4		20%10YR 5/2	sicl	34	2	1	m	sbk	fi	
Cd	30+	10YR 4/4		15%10YR 5/2	sil	32	5	0		m	vfi	
Limiting Conditions												
Limiting Conditions		Depth (in)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		10		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>60										
Highly Permeable Material		>60										
Bedrock		>60										
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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 8
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sil	22	2	1	m	gr	fr	
Bt1	9 to 22	10YR 5/4		15%10YR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	22 to 30	10YR 5/4		25%10Yr 5/2	sicl	35	2	2	m	sbk	fi	
BC	30 to 35	10YR 5/4		15%10Ry 5/2	sicl	34	2	1	m	sbk	fi	
Cd	35+	10YR 4/4		12%10YR 5/2	sil	32	5	0		m	vfi	
Limiting Conditions		Depth (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		>60										
Highly Permeable Material		>60										
Bedrock		>60										
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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 9
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)		Redoximorphic Features	Texture			Structure			Consistence	
Horizon	Depth (inches)	Matrix Color	Concentrations		Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size		Type (shape)
Ap	0 to 8	10YR 4/3			sil	20	2	1	m	gr	fr	
Bt1	8 to 15	10YR 5/4		10%10yR 5/2	sicl	30	2	2	m	sbk	fi	
Bt2	15 to 21	10YR 5/4		15%10YR 5/2	sicl	35	2	2	m	sbk	fi	
BC	21 to 24	10YR 5/4		20%10YR 5/2	sicl	32	2	1	m	sbk	fi	
Cd	24+	10YR 4/4		15%10YR 5/2	sil	30	5	0		m	vfi	

Limiting Conditions	Depth (in)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	8	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>60		
Highly Permeable Material	>60		
Bedrock	>60		
Restrictive Layer	24	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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 10
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)		Redoximorphic Features	Texture			Structure			Consistence	
Horizon	Depth (inches)	Matrix Color	Concentrations		Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size		Type (shape)
Ap	0 to 8	10YR 4/3			sil	22	2	1	m	gr	fr	
Bt1	8 to 16	10YR 5/4		15%10YR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	16 to 22	10YR 5/4		18%10YR 5/2	sicl	35	2	2	m	sbk	fi	
BC	22 to 25	10YR 5/4		15%10YR 5/2	sicl	32	2	1	m	sbk	fi	
Cd	25+	10YR 4/4		15%10YR 5/2	sil	30	5	0		m	vfi	

Limiting Conditions	Depth (in)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	8	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>60		
Highly Permeable Material	>60		
Bedrock	>60		
Restrictive Layer	25	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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 11
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 10	10YR 3/3			sil	20	2	1	m	gr	fr	
Bt1	10 to 19	10YR 5/4		25%10YR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	19 to 25	10YR 5/4		30%10YR 5/2	sicl	36	2	2	m	sbk	fi	
BC	25 to 30	10YR 5/4		25%10YR 5/2	sicl	32	2	1	m	sbk	fi	
Cd	30+	10YR 4/4		15%10YR 5/2	sil	30	5	0		m	vfi	

Limiting Conditions	Depth (in)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	10	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>60		
Highly Permeable Material	>60		
Bedrock	>60		
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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 12
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 1 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 3.5/3			sil	20	2	1	m	gr	fr	
Bt1	9 to 18	10YR 5/4		15%10YR 5/2	sicl	34	2	2	m	sbk	fi	
Bt2	18 to 30	10YR 5/4		20%10YR 5/2	sicl	37	2	2	m	sbk	fi	
BC	30 to 32	10YR 5/4		15%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	32+	10YR 4/4		10%10YR 5/2	sil	34	5	0		m	vfi	
Limiting Conditions												
Limiting Conditions		Depth (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		>60										
Highly Permeable Material		>60										
Bedrock		>60										
Restrictive Layer		32		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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 13
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 2 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 12	10YR 4/3			sil	20	2	1	m	gr	fr	
Bt1	12 to 15	10YR 5/4		10%10yR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	15 to 20	10YR 5/4		15%10RY 5/2	sicl	36	2	2	m	sbk	fi	
BC	20 to 25	10YR 5/4		10%10YR 5/2	sicl	35	2	1	m	sbk	fi	
Cd	25+	10YR 4/4		12%10YR 5/2	sil	34	5	0		m	vfi	

Limiting Conditions	Depth (in)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	12	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>60		
Highly Permeable Material	>60		
Bedrock	>60		
Restrictive Layer	25	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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 14
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 2 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 10	10YR 4/3			sil	20	2	1	m	gr	fr	
Bt1	10 to 18	10YR 5/4		15%10Yr 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	18 to 24	10YR 5/4		20%10Yr 5/2	sicl	37	2	2	m	sbk	fi	
BC	24 to 30	10YR 5/4		25%10Yr 5/2	sicl	36	2	1	m	sbk	fi	
Cd	30+	10YR 4/4		15%10Yr 5/2	sil	35	5	0		m	vfi	

Limiting Conditions	Depth (in)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	10	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>60		
Highly Permeable Material	>60		
Bedrock	>60		
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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 15
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 2 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 8	10YR 4/3			sil	20	2	1	m	gr	fr	
Bt1	8 to 17	10YR 5/4		20%10YR 5/2	sicl	33	2	2	m	sbk	fi	
Bt2	17 to 28	10YR 5/4		25%10YR 5/2	sicl	36	2	2	m	sbk	fi	
BC	28t o 32	10YR 5/4		20%10YR 5/2	sicl	34	2	1	m	sbk	fi	
Cd	32+	10YR 4/4		10%10YR 5/2	sil	32	5	0		m	vfi	
Limiting Conditions		Depth (in)	Description			Remarks / Risk Factors:						
Perched Seasonal Water Table		8	perched on glacial till			Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>60										
Highly Permeable Material		>60										
Bedrock		>60										
Restrictive Layer		32	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.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Morrow
 Township / Sec.: Harmony
 Property Address/Location: Lot Splits South of 3788 CR 114
Cardington
 Applicant Name: Bruner Land Company
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 16
 Latitude/Longitude: _____
 Method: Pit Auger X Probe

Land Use / Vegetation: Forbs & Grasses
 Landform: Till Plain
 Position on Landform: Backslope
 Percent Slope: 2 to 3%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: _____
 Date: Tuesday, June 21, 2022
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 22F321
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Site and Soil Evaluation for Sewage Treatment and Dispersal												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)		Redoximorphic Features	Texture			Structure			Consistence	
Horizon	Depth (inches)	Matrix Color	Concentrations		Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size		Type (shape)
Ap	0 to 6	10YR 4/3			sil	20	2	1	m	gr	fr	
Bt1	6 to 20	10YR 5/4		15%10YR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	20 to 25	10YR 5/4		20%10YR 5/2	sicl	35	2	2	m	sbk	fi	
BC	25 to 30	10YR 5/4		25%10YR 5/2	sicl	32	2	1	m	sbk	fi	
Cd	30+	10YR 4/4		15%10YR 5/2	sil	30	5	0		m	vfi	

Limiting Conditions	Depth (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	>60		
Highly Permeable Material	>60		
Bedrock	>60		
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 Plain
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
O	Predominantly organic matter (litter & humus)	a	Highly decomposed organic matter	Numerical Prefixes: Used to denote lithologic discontinuities.
A	Mineral, organic matter (humus) accumulation, loss of Fe, Al, clay	b	Buried genetic horizon	
E	Mineral, loss of Si, Fe, Al, clay, organic matter	d	Densic layer (physically root restrictive)	Numerical Suffixes: Used to denote subdivisions within a master horizon.
B	Subsurface accumulation of clay, Fe, Al, Si, humus; sesquioxides; loss of CaCO ₃ ; subsurface soil structure	e	Moderately decomposed organic matter	
C	Little or no pedogenic alteration, unconsolidated earthy material, soft bedrock	g	Strong gley	
R	Hard bedrock	i	Slightly decomposed organic matter	
		p	Plow layer or artificial disturbance	
		r	Weathered or soft bedrock	
		t	Illuvial accumulation of silicate clay	
		w	Weak color or structure within B	
		x	Fragipan characteristics	

Soil Texture			
Texture Class Abbreviations		Textural Class Modifiers	
Course Sand	cos	Gravelly	GR
Sand	s	Fine Gravelly	FGR
Fine Sand	fs	Medium Gravelly	MGR
Very Fine Sand	vfs	Coarse Gravelly	CGR
Loamy Coarse Sand	lcos	Very Gravelly	VGR
Loamy Sand	ls	Extremely Gravelly	XGR
Loamy Fine Sand	lfs	Cobbly	CB
Loamy Very Fine Sand	lvfs	Very Cobbly	VCB
Coarse Sandy Loam	cosl	Extremely Cobbly	XCB
Sandy Loam	sl	Stony	ST
Fine Sandy Loam	fsl	Very Stony	VST
Very Fine Sandy Loam	vfsl	Extremely Stony	XST
Loam	l	Bouldery	BY
Silt Loam	sil	Very Bouldery	VBY
Silt	si	Extremely Bouldery	XBY
Sandy Clay Loam	scl	Channery	CN
Clay Loam	cl	Very Channery	VCN
Silty Clay Loam	sicl	Extremely Channery	XCN
Sandy Clay	sc	Flaggy	FL
Silty Clay	sic	Very Flaggy	VFL
Clay	c	Extremely Flaggy	XFL
*Estimate approximate clay percentage within 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	l
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.