

PA-3 “Soil Investigation Log” for Conservation Practices (V.2.March.2020)

Owner/Operator Name: _____ Date: _____ County: _____

Logged by: _____ Proposed Practice(s): _____ Mapped Soil Type: _____

☐ Hand Auger

☐ Machine

SAFETY: Prior to testpits, do a “PA One call”. Follow safety Protocols and OSHA Regulations.

Note: Findings from this investigation shall be part of the written narrative or comments used to support design decisions.

Location of Testpits/Borings and proposed practice(s)

Map Unit Report (optional)

_____ Land Capability Class

_____ Drainage class

_____ Hydrologic Soil
Group

_____ Flooding or Ponding

_____ Hydric rating

Potential Observations in Remarks Section

- Depth to water table, seeps, and/or mottles
- Rock outcrop, cobbles, boulders
- Depth to restrictive layer - bedrock, hard shale, till
- Depth to porous layer – sands, gravels
- Disturbed Soil and Fill – type
- Cutbanks, caving or Subsidence
- Organic or muck soils, buried topsoil layer
- Artificial drainage - tile, stone drain

Include: key distances, known sinkholes, well location, streams, springs, floodplain, key landmarks, existing drainage, etc.

Pit No. 1		
Depth	Class	Remarks

Pit No. 2		
Depth	Class	Remarks

COARSE GRAINED SOILS More than half of the material (by weight) is individual grains visible to the naked eye.	GRAVELLY SOILS More than half of Coarse Fraction is larger than ¼ inch.	CLEAN GRAVELS Will not leave a stain on a wet palm			Wide range in grain size and substantial amounts of all grain particle sizes						GW			
					Predominantly one size or a range of sizes with some intermediate sizes missing						GP			
		DIRTY GRAVELS Will leave a stain on a wet palm			Non-plastic fines						GM			
					Plastic fines						GC			
	SANDY SOILS More than half of Coarse Fraction is smaller than ¼ inch.	CLEAN SANDS Will not leave a stain on a wet palm			Wide range in grain size and substantial amounts of all grain particle sizes						SW			
					Predominantly one size or a range of sizes with some intermediate sizes missing						SP			
		DIRTY SANDS Will leave a stain on a wet palm			Non-plastic fines						SM			
					Plastic fines						SC			
FINE GRAINED SOILS More than half of the material (by weight) is individual grains not visible to the naked eye.	RIBBON	None	LIQUID LIMIT	<50	DRY CRUSHING STRENGTH	None to Slight	DILATANCY REACTION	Rapid	TOUGHNESS	Low	STICKINESS	None	ML	
		Weak		<50		Medium to High		None to Very Slow		Medium to High		Medium	CL	
		Strong		>50		Slight to Medium		Slow to None		Medium		Low	MH	
		Very Strong		>50		High to Very High		None		High		Very High	CH	
	Highly Organic Soils													OL OH Pt
	Readily identified by color, odor, spongy feel and frequently by fibrous texture													

<u>Unified Classification</u>	
GW –	Well graded gravels: gravel, sand mix
GP –	Poorly graded gravels
GM –	Silty gravels: gravel-sand-silt mix
GC –	Clayey gravels: gravel-sand-clay mix
SW –	Well graded sands: sand-gravel-mix
SP –	Poorly graded sands
SM –	Silty sand
SC –	Clayey sands: clay mixtures
ML –	Silts: silty, v. fine sands; sandy or clayey silt
CL –	Clays of low to medium plasticity
CH –	Inorganic clays of high plasticity
MH –	Elastic silts
OL –	Organic silts and silty clays, low plasticity
OH –	Organic clays, medium to high plasticity

Pit No. 3		
Depth	Class	Remarks

Pit No. 4		
Depth	Class	Remarks

Pit No. 5		
Depth	Class	Remarks

Pit No. 6		
Depth	Class	Remarks