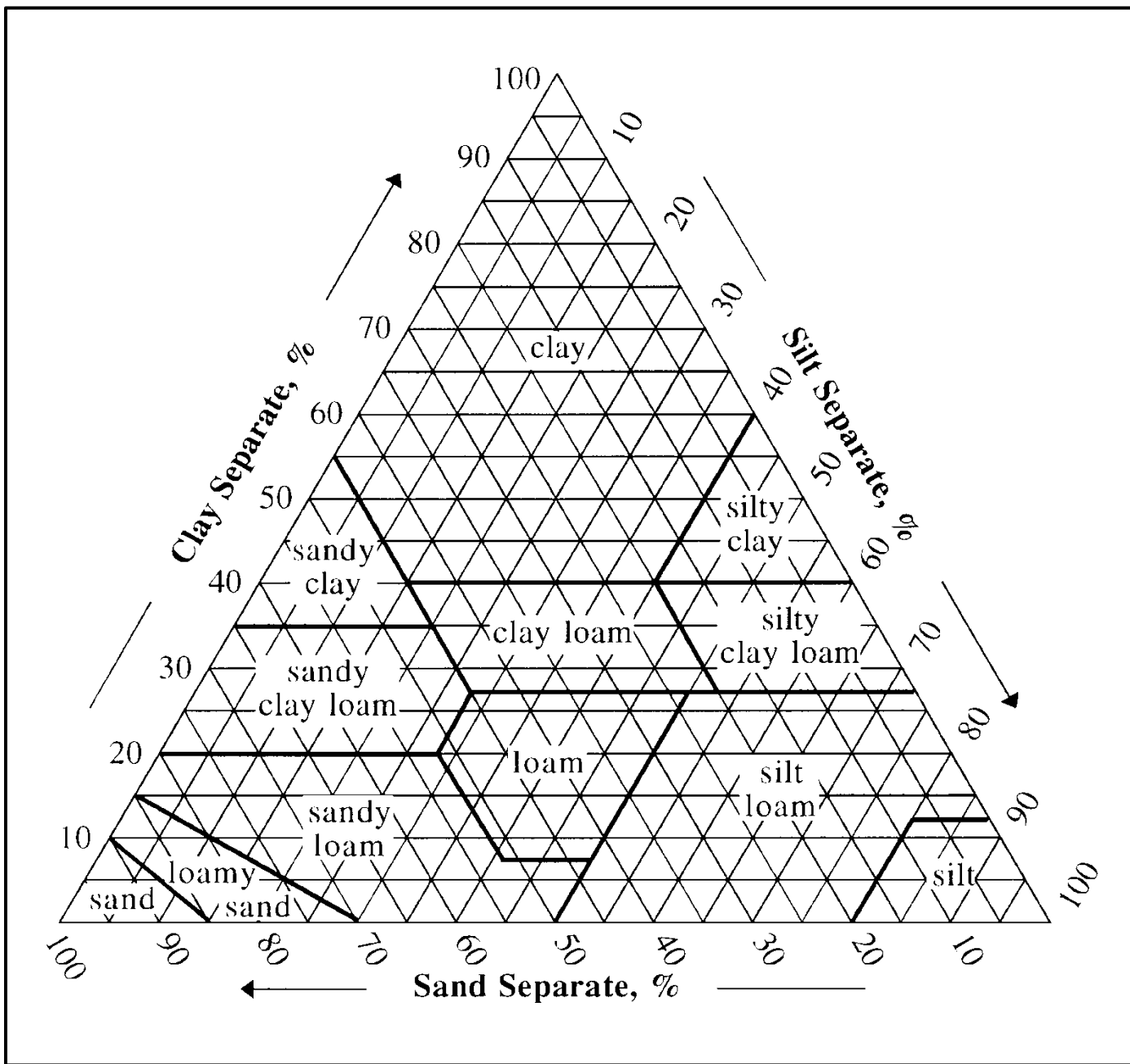


Attachment 1 - USDA SOIL TEXTURAL TRIANGLE

This page shall be provided to each student at the contest.



Attachment 2 – NACTA Rating Guides (2-Year Division)

This page shall be provided to each student at the contest.

NACTA Rating Guide for **ROADFILL**

Property	Good	Fair	Poor	Feature
Depth to bedrock	> 150 cm.	100 -150 cm.	< 100 cm.	Depth to Rock
Depth to root limiting layer	> 150 cm.	100 – 150 cm.	< 100 cm.	Limiting Layer
Shrink Swell	< 8 cm. clay	8 – 16 cm. clay	> 16 cm. clay	Shrink Swell
Texture (avg. 25 – 100 cm.)	S, LS, SL	L, SCL	all others	Low Strength
% >8 cm. stones, 0 to 40 cm.	< 25%	25 – 50%	> 50%	Large Stones
Depth to high water table	> 90 cm.	30 – 90 cm.	< 30 cm.	Wetness
Slope	< 15%	15 – 25%	> 25%	Slope

NACTA Rating Guide for **SEPTIC TANK ADSORPTION FIELDS**

Property	Slight	Moderate	Severe	Feature
Flooding	none	Rare	freq. / occas.	Flooding
Depth to bedrock	> 180 cm.	100 – 180 cm.	< 100 cm.	Depth to Rock
Depth to root limiting layer	> 180 cm.	100 – 180 cm.	< 100 cm.	Limiting Layer
Ponding	no	-----	yes	Ponding
Depth to high water table	> 180 cm.	120 – 180 cm.	< 120 cm.	Wetness
Permeability (60 – 150 cm.)	S, LS, SL	SCL, L, SIL, SI	all others	Percs Slowly
Permeability (60 – 150 cm.)	all others	-----	S, LS	Poor Filter
Slope	< 8%	8 – 15%	> 15%	Slope
% > 8 cm. stones, 0 to 40 cm.	< 25%	25 – 50%	> 50%	Large Stones

NACTA Rating Guide for **SEWAGE LAGOONS**

Property	Slight	Moderate	Severe	Feature
Permeability (30 – 150 cm.)	all others	SCL, L, SIL, SI	S, LS, SL	Seepage
Depth to bedrock	> 150 cm.	100 – 150 cm.	< 100 cm.	Depth to Rock
Depth to root limiting layer	> 150 cm.	100 – 150 cm.	< 100 cm.	Limiting Layer
Flooding	none, rare	-----	occas., freq.	Flooding
Slope	< 2%	2 – 7%	> 7%	Slope
Ponding	no	-----	yes	Ponding
Depth to high water table	> 150 cm.	110 – 150 cm.	< 110 cm.	Wetness
% >8 cm. stones, 0 to 40 cm.	< 20%	20 – 35%	> 35%	Large Stones

Attachment 3 – NACTA SOILS CONTEST SITE CARD (2-Year Division)

This page shall be posted at each pit location at the contest.

SITE NO. _____

Describe _____ **horizons to a depth of** _____ **cm.**

Red marker is in the third horizon at _____ **cm.**

This site floods _____ **times within** _____ **years.**

Attachment 4 -APPLICATION FOR SELECTED INTERPRETATIONS

This page is to assist with interpreting Attachment 2 only and shall NOT be provided to each student at the contest.

ROADFILL

PROPERTY	FACTOR	INTERPRETATION
Depth to root limiting layer		Should be interpreted as any root limiting layer not including bedrock
Shrink Swell	Clay	Clay is to be interpreted as Sandy clay, Silty clay, and Clay
Texture (avg. 25 – 100 cm.)	Textural classes	The average between 25 and 100 cm.

SEPTIC TANK ABSORPTION FIELDS

PROPERTY	FACTOR	INTERPRETATION
Flooding (SSM 3-100)	Rare	1-5 times per 100 years
	Occasional	6-50 times per 100 years
	Frequent	More than 50 times per 100 years
Depth to root limiting layer		Should be interpreted as any root limiting layer not including bedrock
Ponding	Yes	Class V would be the best possible Land Class
	-----	Not a possible choice
Permeability (60–150 cm)	Textural classes	Any layer of the specified texture class existing between 60 and 150 cm.
	-----	Not a possible choice

SEWAGE LAGOONS

PROPERTY	FACTOR	INTERPRETATION
Permeability (30–150 cm.)	Textural classes	Any layer of the specified texture class existing between 30 and 150 cm.
Flooding (SSM 3-100)	Rare	1-5 times per 100 years
	Occasional	6-50 times per 100 years
	Frequent	More than 50 times per 100 years
	-----	Not a possible choice
Depth to root limiting layer		Should be interpreted as any root limiting layer not including bedrock
Ponding	Yes	Class V would be the best possible Land Class
	-----	Not a possible choice