COUNTY OF TWO HILLS

County of Two Hills
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www.thcounty.ab.ca

the inspections group inc.

PRIVATE SEWAGE DISPOSAL SYSTEM APPLICATION FORM

Application Date: _____ **Estimated Project Start Date:** _____

Estimated Project Completion Date: _____

Applicant Type: ☐ **Homeowner** ☐ **Contractor** **Cost of Installation (Labour & Material including Equipment)** **$**_____

The Permit Holder hereby certifies that this installation will be completed in accordance with the Alberta Safety Codes Act. A permit may expire if the undertaking to which it applies: (a) is not commenced within 90 days of issue of the permit, (b) is suspended or abandoned for a period of 120 days. An extension can be considered when applied for in writing prior to permit expiry date.

Owner Name: _____ Mailing Address: _____

City: _____ Prov: _____ Postal Code: _____ Phone: _____ Fax: _____

_____ Cell: _____ Email: _____

Owner's Signature / Declaration (Single Family Residential Only)
"I hereby declare I am the owner of the premises in which the work will be conducted, and reside or will reside on the property. I am doing the work myself, and assume responsibility for compliance with the applicable Act and Regulations"

Company Name: _____ Mailing Address: _____

City: _____ Prov: _____ Postal Code: _____ Phone: _____ Fax: _____

Cell: _____ Email: _____

_____ _____ _____

PSDS Installer's Number | Print Private Sewage Installer's Name | Installer's Signature

Project Location in the County of Two Hills:

Street Address: _____

Legal Subdivision: Part of: _____ Section: _____ Township: _____ Range: _____ West of: _____

Subdivision Name: _____ Lot: _____ Block: _____ Plan: _____

Directions: _____

INSTALLATION:

☐ New installation
☐ Alteration

Expected Volume of Sewage:

_____

☐ m3 per day
☐ Litres per day
☐ Gallons per day

TYPE OF WORK:

☐ Commercial
☐ Residential
_____ Number of Bedrooms
☐ Work Camp
_____ Number of Men
☐ Other _____

TREATMENT / DISPOSAL METHODS (COMPLETE ALL APPLICABLE ITEMS):

☐ Treatment Mound ☐ Disposal Field
☐ Sewage Lagoon ☐ Open (Surface) Discharge
☐ Sand Filter ☐ Packaged Sewage Treatment Plant
☐ Septic Tank Size _____
☐ Sewage Holding Tank Size: _____
☐ Other _____

Description of Work: _____

COMPLETE THE ATTACHED SITE EVALUATION REPORT.

Payment Type: ☐ Cash ☐ Cheque ☐ Interac ☐ M/C ☐ Visa

Permit Fee: $ _____

+ SCC Levy*: $ _____

Total Cost: $ _____ Receipt #: _____

*$4.50 or 4% of the permit fee maximum $560.00

The Inspections Group Inc.
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EDMONTON AB T5M 3Z7
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www.inspectionsgroup.com

questions@inspectionsgroup.com

REMIT PAYMENT AND APPLICATION TO THE INSPECTIONS GROUP INC.
PLEASE CONTACT THE INSPECTIONS GROUP INC. FOR INSPECTIONS ALLOWING 2 – 5 WORKING DAYS NOTICE AND PROVIDE SAFE ACCESS.

PSDS PERMIT APPLICATION CHECKLIST

A COMPLETE SITE EVALUATION REPORT, AS PER THE 2021 ALBERTA PRIVATE SEWAGE SYSTEMS STANDARD OF PRACTICE (SOP) PART 7 SITE EVALUATION, IS REQUIRED WITH THE PERMIT APPLICATION. THE FOLLOWING DOCUMENTS ARE TO BE INCLUDED WITH YOUR COMPLETE SITE EVALUATION REPORT.

TREATMENT FIELD, MOUND, OR LFH AT-GRADE SYSTEMS

- ☐ Wastewater strength projected for the development.
- ☐ Peak flow volume calculations for the development including confirmation plumbing fixture unit total is not exceeded.
- ☐ Site plan – as per current SOP Section 7.1 Site Characteristics and Evaluation Procedures including placement of system with setbacks noted for property lines, buildings, water sources/courses, description of surface features including slope and landscape, location of at least two (2) soil profile investigation locations in the area of the soil-based treatment system, etc.
- ☐ The characteristics of each soil profile investigated shall be described using Canadian System of Soil Classification nomenclature and includes complete site specific soil profile logs for at least two (2) locations, soil sample results of the most limiting condition, GPS coordinates of each soil profile with permanent benchmark, depth of each horizon identified, soil Colour (Munsell Nomenclature), soil texture, structure and grade, depth to most limiting condition, restrictive layer (if applicable), etc.
- ☐ Description of treatment system including a system diagram, piping to tank details, initial treatment (septic tank/ treatment plant), piping to and throughout final soil treatment component.
- ☐ Soil based treatment system design calculations, including pressure distribution system – if applicable.
- ☐ Tank certification information – CAN/CSA-B66 certificate or equivalent
- ☐ Package sewage treatment plant – treatment capacity, equipment structural requirements and certification (if applicable).
- ☐ Pump, if required by design. Manufacturer and pump curve to ensure flow capacity.
- ☐ High level alarm make/model.
- ☐ Filter type.

HOLDING TANK

- ☐ Expected wastewater volume/day including tank storage capacity, bedroom count – current and proposed.
- ☐ Site plan showing placement of system with setbacks noted for property, buildings and water source.
- ☐ Tank certification information – CAN/CSA-B66 certificate or equivalent
- ☐ High level alarm make/model

OPEN DISCHARGE SYSTEM

- ☐ Peak flow volume calculations for the development including confirmation plumbing fixture unit total is not exceeded.
- ☐ Site plan – as per current SOP Section 7.1 Site Characteristics and Evaluation Procedures including placement of system with setbacks noted for property lines, buildings, water sources/courses, description of surface features including slope and landscape, location of at least one (1) soil profile investigation location in the area of the soil-based treatment system, etc.
- ☐ The characteristics of each soil profile investigated shall be described using Canadian System of Soil Classification nomenclature and includes complete site specific soil profile logs for at least one (1) location, soil sample results of the most limiting condition, GPS coordinates of each soil profile with permanent benchmark, depth of each horizon identified, soil Colour (Munsell Nomenclature), soil texture, structure and grade, depth to most limiting condition, restrictive layer (if applicable), etc.
- ☐ Description of treatment system including a system diagram, piping to tank details, Septic Tansnk, piping to and throughout final soil treatment component.
- ☐ Tank certification information – CAN/CSA CSA-B66 certificate or equivalent
- ☐ Pump, if required by design. Manufacturer and pump curve to ensure flow capacity
- ☐ High level alarm make/model
- ☐ Filter type.

PSDS Application Design Summary

This document must be filled out with ALL relevant information or your application may be returned

Legal Land Description								
Quarter	Section	Township	Range	West of		Lot	Block	Plan

Municipal Address

Development Details				
Property type _____			New – Renovation – Repair - Replacement (Circle One)	
Total Bedrooms	Occupant Total	Average Daily Flow	Peak Daily Flow	

Soil Information			
Test Pit(s) Depth	Limiting Layer Depth	Restrictive Layer Depth	Depth to Seasonal Water

Design Loading Rate	Linear Loading Rate	Infiltration Area	Texture	Shape	Grade

Primary Treatment (Circle all that apply) Holding Tank – Septic Tank – Treatment Plant

Tank Size	Tank Make/Model	Filter Type

High Level Alarm Make/Model	Effluent Filter Make/Model

Additional Information

All designs must meet the requirements of the current Standard of Practice available at:
https://ebs.safetycodes.ab.ca/documents/webdocs/PI/PSS_SOP_2021-web6.pdf

Please note: NO WORK MAY START WITHOUT A PERMIT BEING ISSUED. An application is not a Permit.

Design Documents may be found at: https://www.alberta.ca/private-sewage-design-tools

Alberta Private Sewage Treatment System Soil Profile Log Form

Owner Name or Job ID.									
Legal Land Location								Test Pit GPS Coordinates	
LSD-1/4	Sec	Twp	Rg	Mer	Lot	Block	Plan	Easting	Northing

Vegetation notes:		Overall site slope %	
		Slope position of test pit:	

Test hole No.	Soil Subgroup	Parent Material	Drainage	Depth of Lab sample #1	Depth of Lab sample #2

Hori-zon	Depth (cm) (in)	Texture	Lab or HT	Colour	Gleying	Mottling	Structure	Grade	Consistence	Moisture	% Coarse Fragments

Depth to Groundwater		Limiting Soil Layer Characteristic, describe	
Depth to Seasonally Saturated Soil		Depth to Limiting Soil Layer	
Limiting Topography		Depth to Highly Permeable Layer	
Key Limiting Features on System Design			
Weather Condition notes:			
Comments: such as root depth and abundance or other pertinent observations:			

Onsite Sewage System Site Evaluation Lot Diagram Sketch and Notes

Project Name: Lot or Legal Description: Date:

N

Show the proposed location of the onsite sewage system and the following items indicating their distances from the proposed system:

trees
floodplains
wells
water sources
surface water
bedrock outcrops
buildings
property lines
easement lines
ditches or interceptors
banks or steep slopes
fills
driveways
existing sewage systems
underground utilities
soil test pit and borehole locations

drainage course

slope direction

borehole BH 1

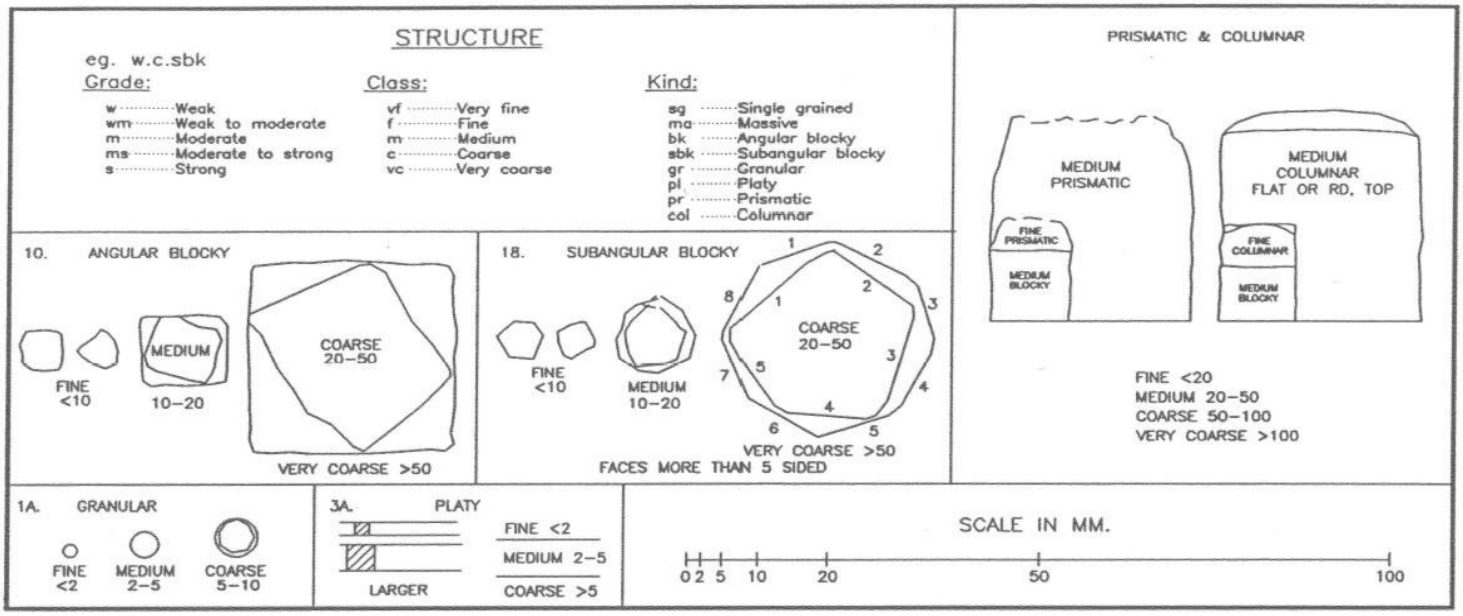
Test Pit P1

Comments:

Property line GPS coordinates:
GPS coordinates of well:
GPS coordinate of tank:
GPS coordinates of soil treatment component corners:

Additional information is required separately for the system design detail.

Figure 4: Diagrammatic representation of soil structure



SLOPE CLASSES OF LOCAL LANDFORMS

Slope Class	Percent Slope	Approximate Degrees	Description
1	0–0.5	0	level
2	0.5–2.5	0.3–1.5	nearly level
3	2–5	1–3	very gentle slopes
4	6–9	3.5–5	gentle slopes
5	10–15	6–8.5	moderate slopes
6	16–30	9–17	strong slopes
7	31–45	17–24	very strong slopes
8	46–70	25–35	extreme slopes
9	71–100	35–45	steep slopes
10	>100	>45	very steep slopes

SURFACE STONINESS

		Surface Area	Distance Apart (cm)
S0	non–stony	<0.01%	>30
S1	slightly stony	0.01–0.1%	10–30
S2	moderately stony	0.1–3%	2–10
S3	very stony	3–15%	1–2
S4	exceedingly stony	15–50%	0.1–5
S5	excessively stony	50%	0.1

SLOPE POSITION

c	– crest
u	– upper slope
m	– mid slope
l	– lower slope
t	– toe
d	– depression
l	– level

DRAINAGE

VR	- very rapidly
R	- rapidly
w	- well
M	- moderately well
I	- imperfectly
P	- poorly
VP	- very poorly

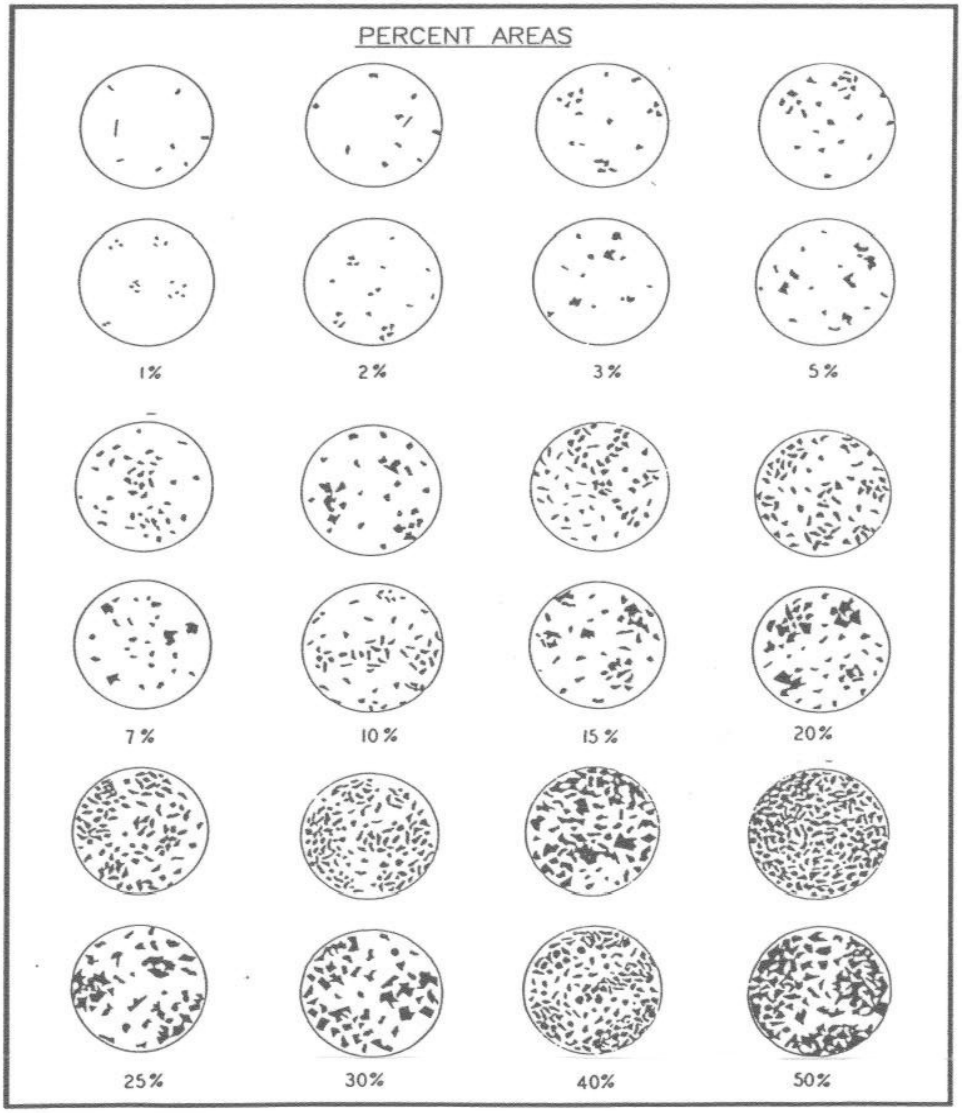


Table 10. Types, kinds and classes of soil structure.

Type	Kind (Kind Code)	Structure Class and Code	Size[1] (mm)
Blocklike - soil particles arranged around a point and bounded by flat or rounded surfaces **BK**	**Angular blocky (ABK)** peds bounded by flattened, rectangular faces intersecting at relatively sharp angles	**VF:** very fine angular blocky	<5
		F: fine angular blocky	5-10
		M: medium angular blocky	10-20
		C: coarse angular blocky	20-50
		VC: very coarse angular blocky	>50
	Subangular blocky (SBK): peds bounded by slightly rounded, subrectangular faces with vertices[2] of their intersections mostly subrounded	**VF:** very fine subangular blocky	<5
		F: fine subangular blocky	5-10
		M: medium subangular blocky	10-20
		C: coarse subangular blocky	20-50
		VC: very coarse subangular blocky	>50
	Granular (GR): spheroidal peds bounded by curved or very irregular faces that do not adjoin those of adjacent peds	**VF:** very fine granular	<1
		F: fine granular	1-2
		M: medium granular	2-5
		C: coarse granular	5-10
		VC: very coarse granular	>10
Platelike: soil particles arranged around a horizontal plane and generally bounded by relatively flat horizontal surfaces **PL**	**Platy (PL):** peds flat or platelike; horizontal planes more or less well developed	**VF:** very fine platy	<1
		F: fine platy	1-2
		M: medium platy	2-5
		C: coarse platy	5-10
		VC: very coarse platy	>10
Prismlike: soil particles arranged around a vertical axis and bounded by relatively flat vertical surfaces. **PR**	**Prismatic (PR):** vertical faces of peds well defined and vertices[2] angular (edges sharp); prism tops essentially flat	**VF:** very fine prismatic	<10
		F: fine prismatic	10-20
		M: medium prismatic	20-50
		C: coarse prismatic	50-100
		VC: very coarse prismatic	>100
	Columnar (COL): vertical edges near top of columns not sharp (vertices[2] subrounded); column tops flat, rounded, or irregular	**VF:** very fine columnar	<10
		F: fine columnar	10-20
		M: medium columnar	20-50
		C: coarse columnar	50-100
		VC: very coarse prismatic	>100
Structureless: no observable aggregation of primary particles or no definite orderly arrangement around natural lines of weakness **MA**	**Single grained (SGR):**	Loose, incoherent mass of individual primary particles, as in sands	
	Massive (MA):	amorphous; a coherent mass showing no evidence of any distinct arrangement of soil particles; separates into clusters of particles; not peds	

Cloddy (CDY): not a structure; used to indicate the condition of some ploughed surface, grade, class, and shape too varied to be described in standard terms.

[1] The size limits refer to measurements in the smallest dimension of platy, prismatic, and columnar peds and to the largest of the nearly equal dimensions of blocky and granular peds.

[2] Definition of vertex (plural, vertices): the intersection of two planes of a geometrical figure.

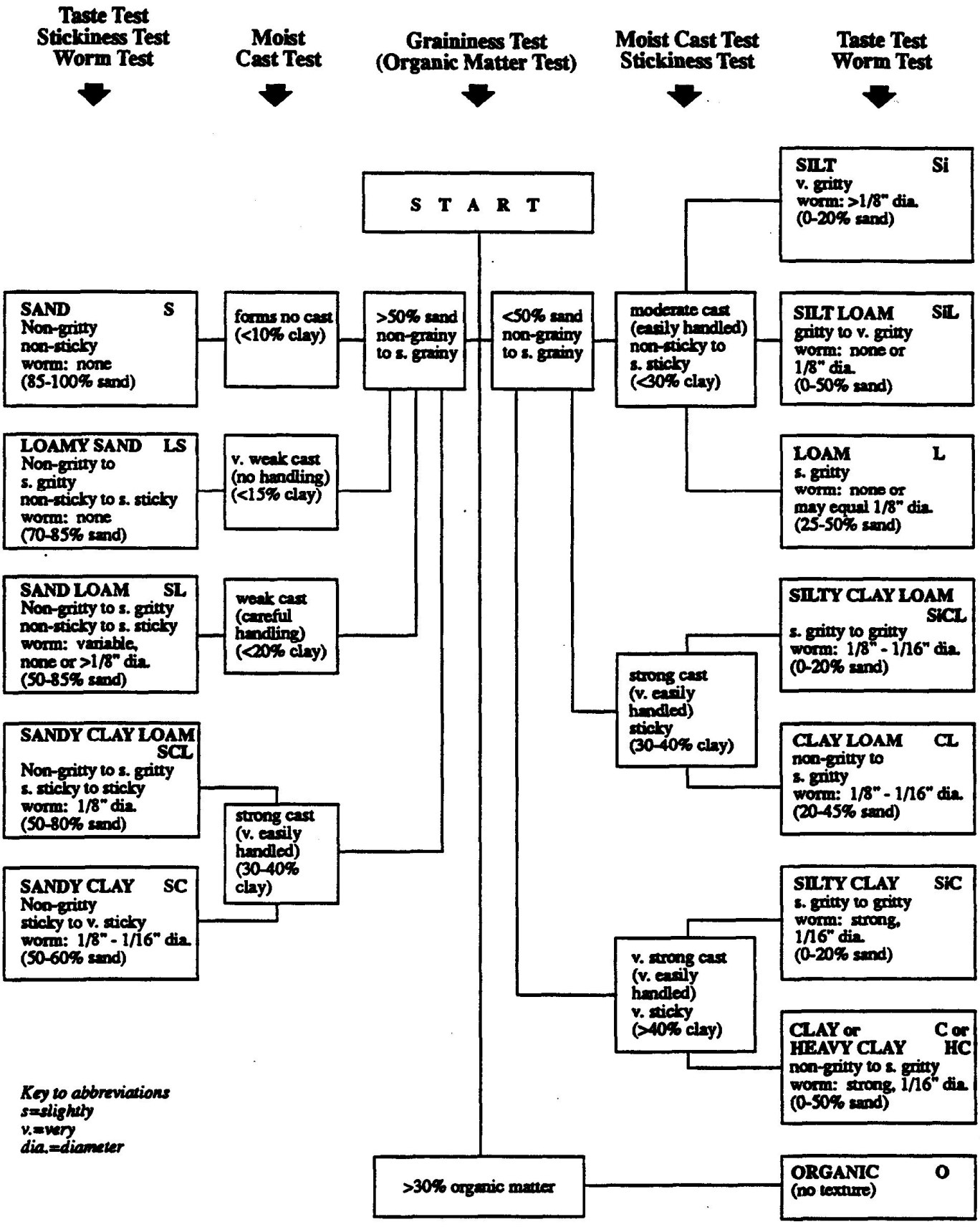
Consistence – moist soil	
• Loose:	No intact sample can be obtained.
• Friable:	Structure breaks down with slight force between the fingers.
• Firm:	Structure breaks down with moderate force between the fingers.
• Extremely firm:	Structure breaks down with moderate force between the hands or slight foot pressure.
• Rigid:	Structure breaks down only with foot pressure.

Structure Grade Descriptions

Code		Structure Grade Definition
0	**Massive /or single grained used to describe sands**	This describes a soil that has no developed structure. There is no aggregation of primary particles or no definite orderly arrangement around natural lines of weakness.
1	**Weak**	Peds are either indistinct and barely evident in place, or observable in place but incompletely separated from adjacent peds. When disturbed, the soil material separates into a mixture of only a few entire peds, many broken peds and much unaggregated material.
2	**Moderate**	Peds are moderately durable, and are evident but not distinct in the undisturbed soil. When disturbed, the soil material parts into a mixture of many well formed, entire peds, some broken peds, and little unaggregated material. The peds may be handled without breaking and they part from adjoining peds to reveal nearly entire surfaces which have properties distinct from those caused by fracturing.
3	**Strong**	Peds are durable and evident in the undisturbed soil, adhere weakly to one another, withstand displacement and separate cleanly when the soil is disturbed. When removed, the soil material separates mainly into entire peds. Surfaces of unbroken peds have distinctive properties, compared to surfaces that result from fracturing.

Mottling Descriptions

Parameter	Code	Description
Abundance	**Few**	<2% of the exposed surface
	Common	2-20% of the exposed surface
	Many	>20% of the exposed surface
Size	**Fine**	< 5 mm
	Medium	5-15 mm
	Coarse	>15 mm
Contrast	**Faint**	Evident only on close examination. Faint mottles commonly have the same hue as the colour to which they are compared and differ by no more than 1 unit of chroma or 2 units of value. Some faint mottles of similar but low chroma and value can differ by 2.5 units of hue.
	Distinct	Readily seen, but contrast only moderately with the colour to which they are compared. Distinct mottles commonly have the same hue as the colour to which they are compared, but differ by 2 to 4 units of chroma or 3 to 4 units of value; or differ from the colour to which they are compared by 2.5 units of hue but by no ore than 1 unit of chroma or 2 units of value.
	Prominent	Contrast strongly with the colour to which they are compared. Prominent mottles are commonly the most obvious colour feature in a soil. Prominent mottles that have medium chroma and value commonly differ from the colour to which they are compared by at least 5 units of hue if chroma and value are the same; or at least 1 unit of chroma or 2 units of value if hue differs by 2.5 units.


Taste Test
Stickiness Test
Worm Test
Moist
Cast Test
Graininess Test
(Organic Matter Test)
Moist Cast Test
Stickiness Test
Taste Test
Worm Test
START
SILT Si
v. gritty
worm: >1/8" dia.
(0-20% sand)
SAND S
Non-gritty
non-sticky
worm: none
(85-100% sand)
forms no cast
(<10% clay)
>50% sand
non-grainy
to s. grainy
<50% sand
non-grainy
to s. grainy
moderate cast
(easily handled)
non-sticky to
s. sticky
(<30% clay)
SILT LOAM SiL
gritty to v. gritty
worm: none or
1/8" dia.
(0-50% sand)
LOAMY SAND LS
Non-gritty to
s. gritty
non-sticky to s. sticky
worm: none
(70-85% sand)
v. weak cast
(no handling)
(<15% clay)
LOAM L
s. gritty
worm: none or
may equal 1/8" dia.
(25-50% sand)
SAND LOAM SL
Non-gritty to s. gritty
non-sticky to s. sticky
worm: variable,
none or >1/8" dia.
(50-85% sand)
weak cast
(careful
handling)
(<20% clay)
SILTY CLAY LOAM
SiCL
s. gritty to gritty
worm: 1/8" - 1/16" dia.
(0-20% sand)
strong cast
(v. easily
handled)
sticky
(30-40% clay)
CLAY LOAM CL
non-gritty to
s. gritty
worm: 1/8" - 1/16" dia.
(20-45% sand)
SANDY CLAY LOAM
SCL
Non-gritty to s. gritty
s. sticky to sticky
worm: 1/8" dia.
(50-80% sand)
strong cast
(v. easily
handled)
(30-40%
clay)
SILTY CLAY SiC
s. gritty to gritty
worm: strong,
1/16" dia.
(0-20% sand)
SANDY CLAY SC
Non-gritty
sticky to v. sticky
worm: 1/8" - 1/16" dia.
(50-60% sand)
v. strong cast
(v. easily
handled)
v. sticky
(>40% clay)
CLAY or C or
HEAVY CLAY HC
non-gritty to s. gritty
worm: strong, 1/16" dia.
(0-50% sand)
Key to abbreviations
s=slightly
v.=very
dia.=diameter
>30% organic matter
ORGANIC O
(no texture)

SYSTEM DRAWING

- ✓ **Complete drawing of proposed system, layout of laterals, position and location of tank etc.**

Comments:

_____

_____

_____

_____

_____

_____

_____

_____