

**Lac La Biche County**

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The Inspections Group

12010 – 111 Avenue, Edmonton, AB T5G 0E6

Phone: (780) 454-5048 Toll Free: 1-866-554-5048

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PRIVATE SEWAGE DISPOSAL SYSTEM PERMIT APPLICATIONPermit Taken: Owner Contractor Permit Number: _____ File Number: _____

Date of Application (Y/M/D) ____/____/____ E-site Number: _____ Roll Number: _____

System Design Criteria (complete all applicable items): Residence # of bedrooms _____ Other _____
 Expected daily volume of effluent (litres/gallons): _____ Depth to Water Table if less than 3m from ground surface (metres): _____

First Private Sewage System Component (check applicable component and complete all applicable items): ____ Septic Tank: Working Capacity (litres) _____ Packaged Sewage Treatment Plant ____ Sewage Lagoon: Storage surface area (ft ²): _____ Sewage Holding Tank	Sand Filter Type: ____ Coarse ____ Medium Area: _____ m ²
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Effluent Treatment Components (complete all applicable items):
 Sizing method: Percolation Rate: _____ Soil Type: _____ Other (specify): _____
 Sizing method test conducted by (name): _____
 Disposal Field: trench area (m²): _____ or Open discharge or Other (specify): _____
 Treatment mound: sand bed area (m²): _____ Base infiltrative area (m²): _____

Attach a basic system sketch including location in relation to buildings, distance to water supply and/or surface water bodies, other pertinent information.

Project Installation Address _____
 Legal: Lot _____ Blk _____ Plan _____ **OR** Part of _____ 1/4Sec _____ Twp _____ Rg _____ W of _____
 Subdivision Name (if applicable) _____ Approximate Completion Date: (Y/M/D) ____/____/____
 Description of the project _____ Cost of Installation (labour plus materials) \$ _____

The Permit Holder hereby certifies that this installation will be completed in accordance with the Alberta Safety Codes Act & Regulations and shall commence *within 90 days*. This permit expires after one year without a prior extension request.**SIGNATURE: Owners Declaration (Home Owner Permits Only)**

I hereby declare that I am the Owner of the premises in which the work will be conducted and reside in the residence. I am performing the work myself, and assume responsibility for compliance with all applicable Acts, Codes & Regulations.

Name _____
 Phone No. () _____ Cell No. () _____
 Fax No. () _____
 Mailing Address _____
 City _____
 Province _____ Postal Code _____
 Email _____

SIGNATURE: Certified Private Sewage Installer

Private Sewage Installer _____
 Certification No. _____
 Company Name _____
 Phone No. () _____ Cell No. () _____
 Fax No. () _____
 Mailing Address _____
 City _____
 Province _____ Postal Code _____
 Email _____

Type of Payment: MC VISA INTERAC CASH CHEQUE

Card No. _____ Expiry Date _____
 Card Holder Name _____
 Card Holder Signature _____
 Permit Fee \$ _____ + SCC Levy \$ _____
 SCC Fee: \$4.50 or 4% of the permit fee (whichever is greater) maximum \$560.00
 Total Fees \$ _____ Receipt # _____

AUTHORIZATION

Issuing Officer Name _____
 Designation # _____
 Issuing Officer's Signature _____
 Date Issued _____

Please contact The Inspections Group at (780) 454-5048 Toll free: 1-866-554-5048 Fax: (780) 454-5222 for inspections allowing two working days notice!
The personal information provided as part of this application is collected under Sec. 43 of the Safety Codes Act and Sections 303 and 295 of the Municipal Government Act and in accordance with Section 32.c of the Freedom of Information and Protection of Privacy Act.



Private Sewage Disposal Site Plan

(To Be Provided with PSDS Permit Application)

Installer's Name: _____ Installer's Phone: _____

Owner's Name: _____ Owner's Phone: _____

Date of Installation (M/D/Y): _____ Installation Location: _____

Total Parcel Size: _____ Feet x _____ Feet



Note: Do not backfill prior to inspection.

Please indicate the following information on sketch:

1. Location of well/cistern and any slough's or waterways.
2. Location of buildings/proposed buildings / property lines.
3. Location of septic tank, field, mound, treatment tank or any other components of the PSD system.
4. Include distances from all items mentioned above.
5. Length and number of laterals.



PSDS PERMIT APPLICATION

Minimum Information Required When Applying

1. A completed PSDS application form, including owners name and complete mailing address c/w postal code, Installers Name, PS Certificate #, mailing address c/w PC, Project Location, Tank Size, Type of system(i.e. Field, Mound, At-Grade, Open Discharge), size of field or mound sand bed area, and owner's or Installers signature.
2. A dimensioned diagram of lot showing; location of building being served, location of tank (septic, holding, Packaged Sewage Treatment plant), location of water source (well, buried cistern), location of soil based treatment area(mound, field, open discharge, etc.), driveway, out buildings, easements, utility right of ways, any water courses(streams, creeks, rivers, lakes, etc.) and dimensions between any of the above and septic system.
3. At least 2, completed, SOIL Profile Log Forms, (for mounds, fields, at-grades) or at least 1 for open discharge.
4. At least 2, laboratory soils analysis reports, (for mounds, fields, at-grades) or at least 1 for open discharge.
5. A completed Design Summary Report, either of their own format or they can fill in and use ours, from our website.
6. Any supporting documentation for the type of installation

(worksheets, variance applications(at-grades), documents of, model numbers for pumps, filters, etc.

Note: For Septic Holding Tanks, Items # 1. and 2. above must be submitted. For all other systems all of the above apply.

Site Evaluation Report Form

Description of Property

(a)

Municipal Address: _____

Lot: _____, Block: _____, Plan: _____

Part of Sec. Twp. Range Meridian

Legal Land Description: _____, _____, _____, _____, W of _____

(b)

Date, Time, Temperature & Weather Conditions at Time of Site Evaluation:

Date: _____, Time: _____, Temp: _____, Conditions: _____

(c)

Plan (Diagram) of Property:

You Must Include A Site Diagram of The Property On Which Sewage System Will Be Installed. This Diagram Must Be To Scale or Dimensioned And Must Include the Following Information.

- Property Size in Acres.**
- All Property Boundary Lines, including lengths in meters or (ft.).**
- Buildings, Roads, Driveways, and other property improvements, either existing or proposed.**
- Existing Easements.**
- Wells or proposed well locations on the property or adjacent properties within 50 m (165 ft.) or 100 m (330 ft.) For Lagoons.**
- Topography of the proposed treatment site(s).**
- Surface waters, rock outcrops, and drainage features.**
- Soil Test Pits or boring Locations with surface elevations.**
- Location of a permanent benchmark and it's elevation.**
- Outline of Available Treatment Areas.**

Note: You may use the **Lot Diagram Form** provided for this use.

(d) **Soil Profile Reporting**

Descriptions of each soil profile investigated provided on appropriate form. (Note: 2 **Private Sewage Treatment System Soil Log Forms** are included with this site evaluation report form).

The characteristics of each soil profile investigated shall be described using Canadian System of Soil Classification nomenclature and include the following in the soil profile description.

- 1. Soil Horizons: the distance from the ground surface to the top and bottom of each soil horizon observed shall be measured and distinctness and topography of the horizon boundaries described.
- 2. Soil Color: for each soil lies and identified, the matrix color and quantity, size, contrast, and color of any redoximorphic features present shall be described.
- 3. Texture: for each Verizon identified, the soil texture classification including any appropriate texture modifier shall be reflected in this evaluation report and **a soil sample of the most restricting layer** affecting the design shall be collected and **analyzed at a laboratory** using a recognized grain or particle size analysis method to determine the texture of the sample.
- (e) A statement regarding the treatment capability and dispersal capacity of the available site(s).
- (f) Where the soil profile includes features that will require the lateral movement water through the soil away from the dispersal system, identified constraints on the system design and allowable *effluent hydraulic loading rates*, as it relates to *linear loading rates*.
- (g) A summary of the significant *limiting conditions* of soil profile and site.
- (h) A justification of the locations and number of the soil profiles investigated.

- (i) A description of the development being served including;
- characteristics affecting the determination of peak and average wastewater flows to be used in the design,
 - The peak daily wastewater flow volume to be used for the system design, and
 - anticipated influent wastewater strength.

(j) Copies of **Laboratory Soils Analysis** reports have been attached.

(k) **Number of Soil Profiles Investigated**

A minimum of two test pit excavations shall be investigated at the proposed location for the soil-based treatment component to classify and assess the treatment capacity of the soil.

Minimum Depth of Soil Investigation

(choose appropriate depth)

The soil profiles shall be investigated to a minimum depth below ground surface of;

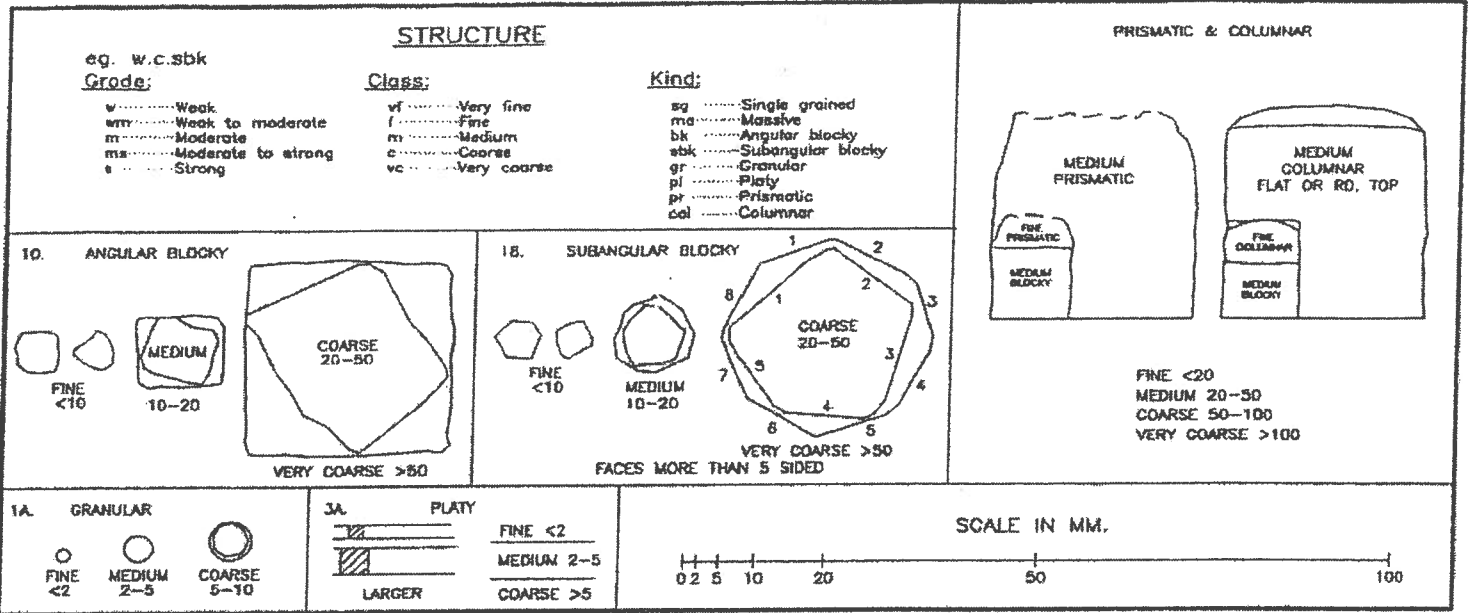
- 4 feet for **Treatment Mounds**.
- 9 feet for **Treatment fields** receiving primary treated effluent,
(Septic Tank Effluent)
- 6 1/2 ft. for **Treatment fields** receiving secondary treated effluent,
(Treatment Plant, Sand Filter Effluent)
- 6 feet for **Open Discharge Systems**.

Note: For **Sewage Holding Tanks** only, ensure that Page 1 Sections (a), (b), and (c), are completely filled out and that all dimensions in section (c) have been clearly indicated.

For All Other Systems, ensure that all information required in sections (a) through (k) are completely filled out and that all dimensions in section (c) have been clearly indicated.

Any Applications Received Which Do Not Have All Required Information Included Will Be Returned.

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	6-8	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

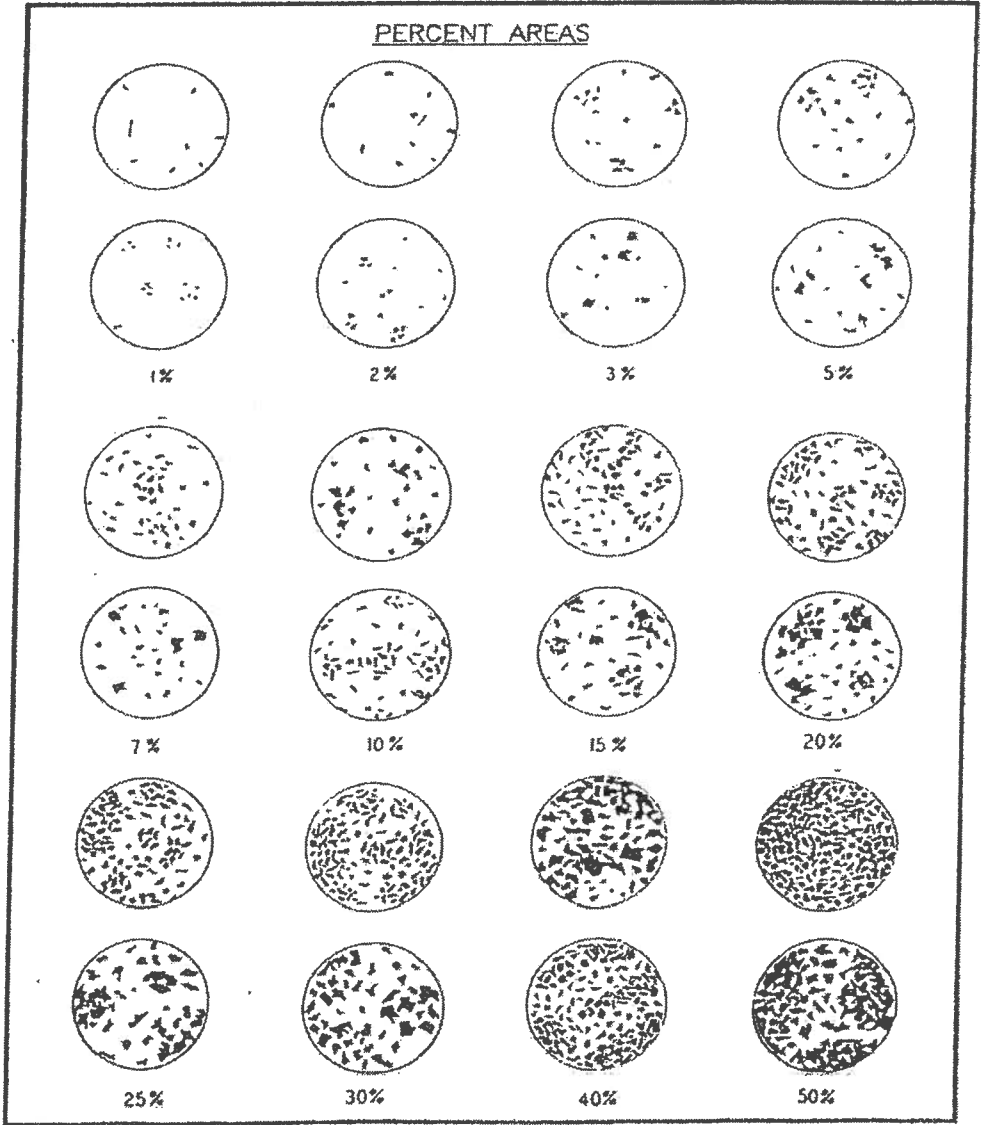


Table 10. Types, kinds and classes of soil structure.

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 F: fine angular blocky M: medium angular blocky C: coarse angular blocky VC: very coarse angular blocky	<5 5-10 10-20 20-50 >50
	Subangular blocky (SBK): peds bounded by slightly rounded, subrectangular faces with vertices ² of their intersections mostly subrounded	VF: very fine subangular blocky F: fine subangular blocky M: medium subangular blocky C: coarse subangular blocky VC: very coarse subangular blocky	<5 5-10 10-20 20-50 >50
	Granular (GR): spheroidal peds bounded by curved or very irregular faces that do not adjoin those of adjacent peds	VF: very fine granular F: fine granular M: medium granular C: coarse granular VC: very coarse granular	<1 1-2 2-5 5-10 >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 F: fine platy M: medium platy C: coarse platy VC: very coarse platy	<1 1-2 2-5 5-10 >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 F: fine prismatic M: medium prismatic C: coarse prismatic VC: very coarse prismatic
	Columnar (COL): vertical edges near top of columns not sharp (vertices ² subrounded); column tops flat, rounded, or irregular	VF: very fine columnar F: fine columnar M: medium columnar C: coarse columnar VC: very coarse prismatic	<10 10-20 20-50 50-100 >100
Structureless: no observable aggregation of primary particles or no definite orderly arrangement around natural lines of weakness MA	Single grained (SGR): Massive (MA):	Loose, incoherent mass of individual primary particles, as in sands 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.

Structure Grade Descriptions

Code		Structure Grade Definition
0	Massive / 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 more 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.

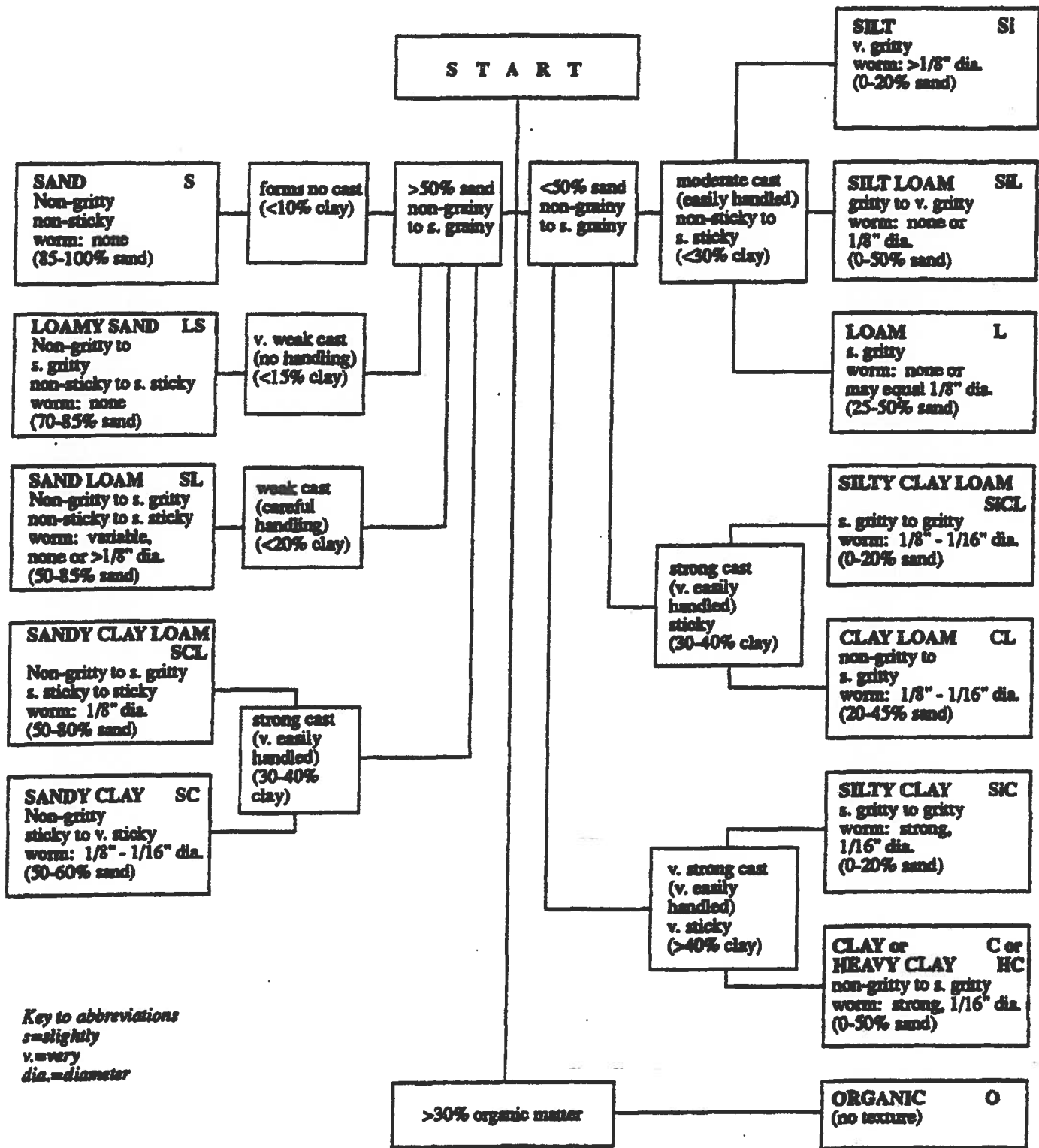
Taste Test
Stickiness Test
Worm Test

Moist
Cast Test

Graininess Test
(Organic Matter Test)

Moist Cast Test
Stickiness Test

Taste Test
Worm Test



Key to abbreviations
s=slightly
v.=very
dia.=diameter