

Town of Bon Accord

PO Box 779 BON ACCORD AB TOA 0K0 Phone: 780 921 3550

780 921 3585 Fax: www.bonaccord.ca



PRIVATE SEWAGE DISPOSAL SYSTEM APPLICATION FORM

| Application Date: DD / MMM / YYY | Y | Estimated Project Start Date: _ | DD / MMM / YYYY |
|--|---|--|--|
| | | Estimated Project Completion Date: | DD / MMM / YYYY |
| Applicant Type: Homeowner Con The Permit Holder hereby certifies that this installation of issue of the permit. (b) is suspended or abandoned | will be completed in accordance with the Alberta Safety | ation (Labour & Material Including Equipment) \$_ y Codes Act. A permit may expire if the undertaking to w ed when applied for in writing prior to permit expiry date. | hich it applies: (a) is not commenced within 90 days |
| | • | ling Address: | |
| | | Phone: | |
| | | Email: | |
| Owner's Signature / Declaration (Single Fa "I hereby declare I am the owner of the prem for compliance with the applicable Act and Re | amily Residential Only) ises in which the work will be conducted, and re | eside or will reside on the property. I am doing the | |
| Company Name: | Mail | ling Address: | |
| City: | Prov: Postal Code: | Phone: | Fax: |
| Cell: | Email: | | |
| PSDS Installer's Number | Print Private Sewage Installer's Name | | Signature |
| Project Location in the Town of Bon Acco | rd: | | |
| Street Address: | | Tax Roll #: | |
| Legal Subdivision: Part of: | Section: Townshi | ip: Range: | West of: |
| Subdivision Name: | Lot: | Block: Plan: | |
| Directions: | | | |
| INSTALLATION: New installation | TYPE OF WORK: Commercial | TREATMENT / DISPOSAL METHODS (COMPLETE ALL APPLICABLE ITEMS): | |
| ☐ Alteration | | ☐ Treatment Mound ☐ Dispo | sal Field |
| Expected Volume of Sewage: | Residential Number of Bedrooms | ☐ Sewage Lagoon ☐ Open | (Surface) Discharge |
| m3 per day | ☐ Work Camp | ☐ Sand Filter ☐ Packa | aged Sewage Treatment Plant |
| ☐ Litres per day | Number of Men | ☐ Septic Tank Size | |
| ☐ Gallons per day | ☐ Other | Sewage Holding Tank Size: | |
| | | ☐ Other | |
| | | | |
| Description of Work: | | | |
| | COMPLETE THE ATTACHED | SITE EVALUATION REPORT. | |
| Payment Type: | ☐ Interac ☐ M/C ☐ Visa | The Inspection 300W, 14310 – 1 Edmonton Af Phone: (780) 454 5048 Fax: (780) 454 5222 www.inspectio questions@inspe | 11 Avenue NW 3 T5M 3Z7 Toll Free: (866) 554 5048 Toll Free: (866) 454 5222 nsgroup.com |
| , | | | |



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.

| IIVI | EATMENT 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. |
| HO | EXAMPLE IN 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 |
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PSDS Application Design Summary

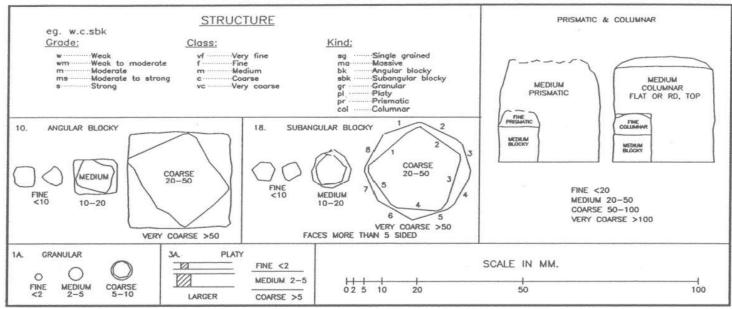
This document must be filled out with ALL relevant information or your application may be returned

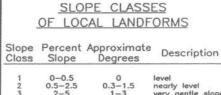
| | | | | | Lega | ıl Laı | nd Descript | tion | | | | | |
|--|---------|--------------------------|-------------|----------------|------------------------|-------------------|--------------|-----------|---------------|--------|-------------|---------------|--------|
| Quarter | Section | n | Townshi | р | Range | ١ | West of | | Lot | Blo | ock | Pla | n |
| | | | | | | | | | | | | | |
| | | | | | M | unic | cipal Addres | SS | | | | | |
| | | | | | | | | | | | | | |
| Development Details | | | | | | | | | | | | | |
| Property type New – Renovation – Repair - Replacement (Circle One) | | | | | | | | | le One) | | | | |
| Total Bedro | oms | Oc | cupant To | tal | Avera | ige [| Daily Flow | Peak I | Daily F | low | | | |
| | | | | | | | | | | | | | |
| | | | | | 9 | oil I | nformation | | | | | | |
| Test Pit(s) [| Depth | Lir | miting Lay | er De | epth | Re | strictive La | yer Dept | h | Dep | th to | Seasonal V | Vater |
| | | | | | | | | | | | | | |
| Design Load | ding Ra | Rate Linear Loading Rate | | | T | Infiltration Area | | | Texture | | Shape | Grade | |
| | | | | | | | | | | | | | |
| Primary Tre | eatmen | t <mark>(Cir</mark> | cle all tha | t app | <mark>oly)</mark> Holo | ling | Tank – Sep | tic Tank | – Trea | tmen | t Pla | nt | |
| Tank Size | | | | Tar | nk Make | e/Mo | Model | | | F | Filter Type | | |
| | | | | | | | | | | | | | |
| High Level | Alarm N | /lake | /Model | | | | Effluent | Filter Ma | ake/M | odel | | | |
| | | | | | | | | | | | | | |
| | | | | | Add | ition | nal Informat | tion | | | | | |
| | | | | | | | | | | | | | |
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| All designs | must m | eet : | the requir | emer | nts of th | ie cu | urrent Stand | dard of P | ractic | e avai | lable | e at: | |
| https://ebs | .safety | code | s.ab.ca/do | <u>cum</u> | ents/w | ebdo | ocs/PI/PSS | SOP 20 | <u>21-we</u> | b6.pd | <u>f</u> | | |
| Please note | e: NO W | ORK | MAY STA | RT W | /ITHOU | ТАБ | PERMIT BEI | NG ISSU | ED. <u>Ar</u> | appli | catio | on is not a P | ermit. |
| Design Doc | uments | ma | y be found | l at: <u>l</u> | nttps:// | wwv | w.alberta.ca | a/private | e-sewa | ige-de | sign | -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 Overall site slope % Vegetation notes: Slope position of test pit: Test hole No. Depth of Lab sample #1 Depth of Lab sample #2 Soil Subgroup Parent Material Drainage Depth Hori-Lab or Colour Gleying Mottling Structure Grade Consistence Moisture % Coarse Texture HT Fragments zon (cm) (in) 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: Show the proposed ÎN 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 fills driveways existing sewage systems underground utilities soil test pit and borehole locations Test Pit P1 □ drainage course slope direction borehole BH 1 Comments: Property line GPS coordinates: GPS coordinates of well: GPS coordinate of tank: GPS coordinates of soil treatment component corners:

Figure 4: Diagrammatic representation of soil structure





| 0-0.5 .5-2.5 | 0.3-1.5 | level nearly level |
|-----------------|---------|-----------------------|
| 2-5 | 1-3 | very gentle slopes |
| 6-9 | 3.5-5 | gentle slopes |
| 10-15 | 6-8.5 | moderate slopes |
| 16-30 | 9-17 | strong slopes |
| 31-45 | 17-24 | very strong slopes |
| 46-70 | 25-35 | extreme slopes |
| 1-100 | 35-45 | steep slopes |
| >100 | >45 | very steep slopes |
| | | |

| SURFACE | STONIN | ESS |
|--|--|---|
| | Surface Area | Distance Apart (cm |
| S0 non-stony S1 slightly stony S2 moderately stony s3 very stony S4 exceedingly stony S5 excessively stony | <0.01% 0.01-0.1% 0.1-3% 3-15% 15-50% | >30 10-30 2-10 1-2 0.1-5 0.1 |

| SLO | PE | POSITION |
|-----|----|-------------|
| c | - | crest |
| u | - | upper slope |
| m | - | mid slope |
| | - | lower slope |
| t | | toe |
| d | - | depression |
| 1 | - | level |

| U | RAINAGE |
|----|-------------------|
| VR | - very rapidly |
| R | - rapidly |
| w | - well |
| M | - moderately well |
| 1 | - imperfectly |
| P | - poorly |
| VP | - very poorly |

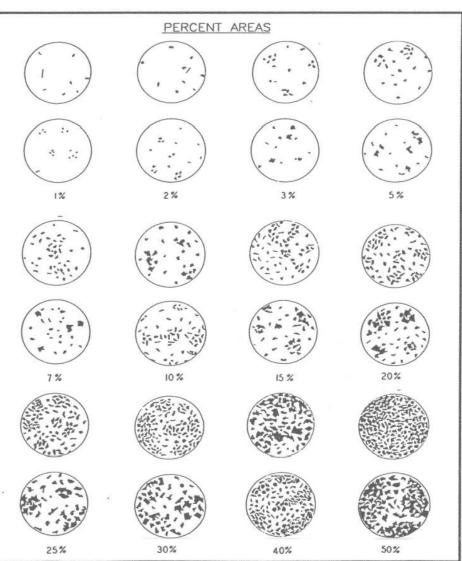


Table 10. Types, kinds and classes of soil structure.

| Type Blocklike - soil particles arranged around a point and bounded by flat or rounded surfaces BK | Kind (Kind Code) Angular blocky (ABK) peds bounded by flattened, rectangular faces intersecting at relatively sharp angles | Structure Class and Code VF: very fine angular blocky F: fine angular blocky M: medium angular blocky C: coarse angular blocky VC: very coarse angular blocky >50 Size¹ (m >5 10 20 5-10 10-20 20-50 20-50 >50 | m) |
|--|---|--|-----|
| | 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 >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 | Single grained (SGR): | Loose, incoherent mass of individual prim particles, as in sands | ary |
| orderly arrangement around natural lines of weakness MA | Massive (MA): | amorphous; a coherent mass showing no evidence any distinct arrangement of soil particles; separa 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.

| 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. | | | | | |

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.

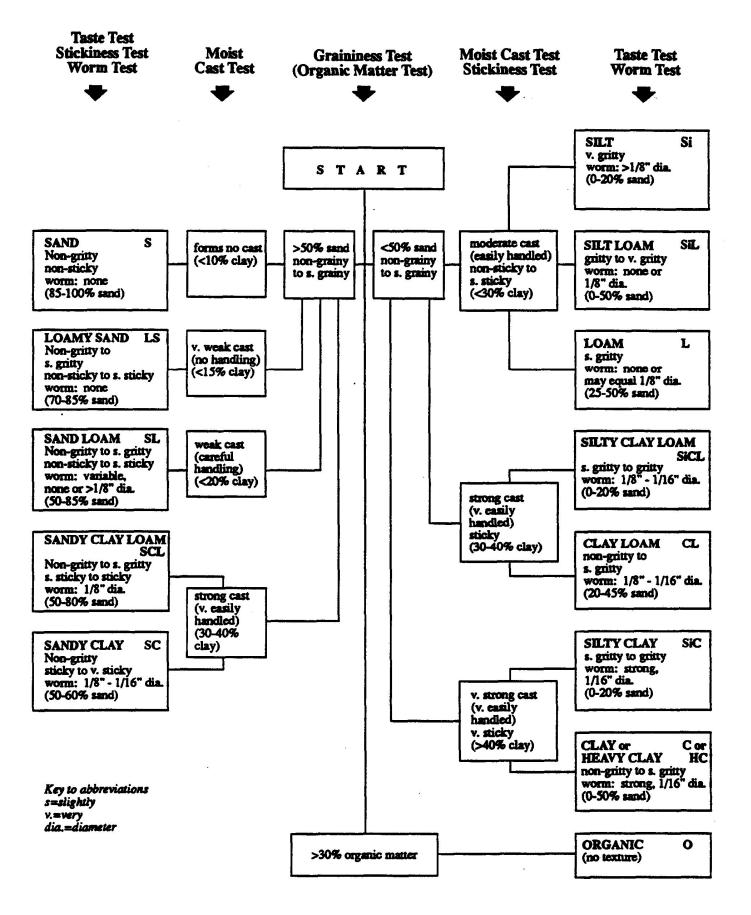
Definition of vertex (plural, vertices): the intersection of two planes of a geometrical figure.

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. | | | | | |



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