Notes and considerations:

• The State Certified Onsite Wastewater Installer or Design Engineer must complete all current application forms completely and provide a proposed design showing all setbacks and easements. Incomplete forms may be returned for correction and/or clarification prior to proceeding with the permitting process.
  o The link for the forms is: http://www.rcgov.org/pdfs/Public-Works/Water%20Reclamation/Onsite%20Wastewater%20Permit%20Application%205-21-14.pdf

• The contractor shall review and apply RCMC § 13.20, as needed: http://www.amlegal.com/nxt/gateway.dll/South%20Dakota/rapidcity_sd/cityofrapidcitysouthdakotacodeofordinanc?f=templates$fn=default.htm$3.0$vid=amlegal:rapidcity_sd

• The contractor must have a signed and completed “As Built” to submit to City Personnel at the time of the final observations.
  o Please consider the quality of the application materials and As Built. The following entities have requested the information:

Manner for conducting test/profile hole(s) and percolation tests (for additional information and percolation requirements for mound systems, refer to § RCMC 13.20.210):

A soil percolation test shall be made in at least 3 test holes within 5 feet of where the proposed absorption system or shallow wastewater system is to be *located. The holes shall be randomly located in soil representative of and similar in character to the rest of the area where the system will be placed. An additional test hole shall be made to a depth of 4 feet beneath the bottom of the proposed **absorption system, unless groundwater or bedrock is encountered first, to determine the type and depth of absorption system required.

The horizontal dimension or diameter of the percolation test hole shall be from 6 to 12 inches and the vertical sides shall extend to the maximum depth of the proposed absorption system or to a depth of at least 30 inches, whichever is greater. The bottom and sides of the holes shall be carefully scarified to remove any smearing from the excavation of the hole and to provide a natural soil surface into which water may penetrate.

Test holes shall be located in unfrozen soil and shall be filled at least 50 percent full with water and maintained at least 25 percent full for at least 8 hours but not more than 16 hours before starting the soil percolation test. Immediately before performing the test, each hole shall be re-filled with water to at least 50 percent of its volume. When the water level reaches the lower 25 percent of the test hole, the test shall begin. The percolation rate of a test hole shall be expressed in the number of minutes it takes the water level to drop 1 inch. The percolation rate for the area where the subsurface infiltration system is desired is the average percolation rate of all the test holes. The percolation tests shall be conducted for 2 hours unless the percolation rate is slower than 45 minutes per inch, in which case the percolation tests shall be run for at least 4 hours.

*If the contractor moves the drainfield location following approval of a design, he or she is responsible for completing the percolation tests as required by the ARSD and § RCMC and resubmitting the design change for approval.

**The profile or test hole(s) must also be four feet below the lowest construction joint on pre-cast concrete septic tanks and/or lift stations.
To avoid delays in the application process, all items for the application request must be complete at the time of submittal. The contractor is responsible for verifying that all easement conditions and/or required setbacks are met. The contractor shall not start the installation, repair, alteration, replacement or upgrade prior to receiving approval from the City of Rapid City.

If State approval and/or variances are required, please attach a copy of the materials submitted to the South Dakota Department of Environment and Natural Resources as well as the approval letter.

The contractor is responsible for attaining all permits as required. Such permits may include an on-site wastewater permit, electrical permit, plumbing permit, or any other permit needed to complete the contracted work.

Address or legal description of property: ____________________________

Tax ID at time of application: __________________

Is a public sewer system located within 400 feet of the structure? □ YES □ NO (if yes, connect to public sewer)

Easements and setbacks have been verified? □ YES □ NO (verification is required)

Commercial property, mound system or experimental system? □ YES □ NO (if yes, need State approval)

Is the property in the flood plain? (Is a flood plain development permit needed?) □ YES □ NO

Number of finished bedrooms: __________

Unfinished area in home or structure: __________ ft²

Number of bedrooms this on-site wastewater system is designed for: __________

Garbage disposal: _____no     _____yes (20% tank upsize & 2 compartment or multiple tanks)

Clothes washer: _____no     _____yes

Dishwasher: _____no     _____yes

Water softener: _____no     _____yes

Self cleaning dehumidifier: _____no     _____yes

Whirlpool bathtub: _____no     _____yes

Multi-head shower: _____no     _____yes

Designed as a: _____ Class I onsite wastewater system; _____*Class II onsite wastewater system (size per RCMC §13.20)

Water Source: ___City/Sanitary District   ___Community Well   ___Private Well on Lot   ___Cistern

Lot size (ft²): __________________

Based on the water source, the lot size meets or exceeds RCMC § 13.20.160: _____no     _____yes

It is understood that drainage is not to enter wastewater systems per RCMC § 13.20.100 (contractor's initials): ________________

The Contractor is responsible for providing an As Built at the final Observation (contractor’s initials): ________________

Contractor: ____________________________  Contractor’s Phone: ____________________________

Contractor’s Address: ____________________________

Property Owner’s Name(s):______________________  Signature (not required): ______________________

Property Owner’s Current Address: ____________________________  Phone: ____________________________
Address or Legal: ____________________________

City personnel will make a cursory observation of the profile hole and may request assistance from State or Federal agencies for determination of bedrock and/or mottling. Depth to Bedrock: _______ Depth to Groundwater or Mottling: _______

The percolation test holes must be within 5’ of the absorption system and be completed per RCMC § 13.20.

Individual Percs (mpi): _____, _____, _____ Average Percolation Rate: ______ minutes per inch (mpi)

Name of person completing percolation test(s): ________________________________

Signature: ____________________________________________________________ Date Completed: __________________________

Address: __________________________________________________________________ Phone: _____________________________

Anticipated Maximum daily flow: ______ gpd

Class 1 = 120 gpd per bedroom or Class 2 = 150 gpd per bedroom

Tank size: _______; _______; _______; _______

Tank Material: _______; _______; _______; _______

Tank Manufacturer: ______________________________________________________

# of compartments: _______; _______; _______; _______; _______; _______; _______; _______; _______

Lift Station Size: ______ gallons (500 minimum)

☐ Chambers (brand/model): ____________________________

(DENR variance needed for serial distribution with chamber)

☐ Drop Box/Distribution Box (brand/model): ____________________________

☐ Gravel/River Rock (depth below pipe): ______ inches

☐ Pump (brand/model): ____________________________

☐ High water alarm (brand/model): ____________________________

☐ Type of treatment system (i.e. trench, mound, serial, bed, experimental, etc.): ____________________________

Required area: ______ ft² - Reduction: ______ ft² = Total Proposed: ______ ft² (1200+ requires dosing / 1800+ requires alt. dosing)

[# of trench lines: ______ Trench length: ______ Trench width: ______] [Bed (length & width): ______ x ______]

All provisions of the Laws and Ordinances of the City of Rapid City and the State of South Dakota governing the type of work being done will be complied with, whether specified herein or not. The granting of a permit does not presume to give authority to violate, cancel or set aside any of the provisions of the building code, zoning ordinances or any other local law or ordinance regulating construction or the performance of construction in the City of Rapid City. The field observation(s) is primarily to determine compliance with the minimum sanitary requirements and does not cover items, such as quality of materials, structural soundness, electrical and mechanical design features. Approval does not in any way release the applicant/owner from the responsibility that the on-site wastewater system will be operable when construction is completed.

Printed name of State Certified Installer: ____________________________ Phone: ____________________________

Signature of State Certified Installer: ____________________________ Date: ____________________________

Conditions for approval:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

City of Rapid City Engineering Division use only

Reviewed by: ____________________________ Date: ____________________________

Observed by: ____________________________ Date: ____________________________
Please show all system components and all that apply in A-G as well as all easements and impervious surfaces. The contractor is responsible for verifying and meeting all setbacks.

**Ground and Terrain Features**

<table>
<thead>
<tr>
<th>Wastewater System Components</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Septic tank, aerobic system, or holding tank</td>
<td>50</td>
<td>75</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Absorption field, mound, evapo-transpiration, seepage pit, or graywater system</td>
<td>100</td>
<td>150</td>
<td>100</td>
<td>100</td>
<td>25</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Sewer lines of tightly jointed tile or equivalent material</td>
<td>50</td>
<td>75</td>
<td>50</td>
<td>50</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sewer lines – materials, construction, testing comply with AWWA standards for water mains</td>
<td>30</td>
<td>30</td>
<td>25</td>
<td>3</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unconventional systems</td>
<td>50</td>
<td>75</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

Please consider future pumping, repairs, sensitive area setbacks, and additions. Also, consider a backup treatment area and future connections to sanitary sewer.

**Address or Legal Description:**

All setbacks have been verified: __________ (initials)

- [ ] Proposed Design is not to scale but shows measurements
- [ ] See attached Proposed Design sheet(s)

**Proposed Design**
Address or Legal Description: __________________________

All setbacks have been verified: __________ (initials)

"As Built" Provided by Contractor

I hereby certify that the installation, repair, upgrade or alteration related information submitted is true and correct, and that, in the exercise of my reasonable professional judgment, the work completed complies with the City of Rapid City wastewater system rules, RCMC § 13.20, and the State of South Dakota Article 74:53:01 Individual and Small On-Site Wastewater systems.

Printed Name of State Certified Installer: __________________________________________________________

Signature of State Certified Installer: __________________________ Date: __________________________