

RESOLUTION NO. 147  
CITY OF DOVER, IDAHO

**A RESOLUTION OF THE CITY OF DOVER, IDAHO, A MUNICIPAL CORPORATION OF THE STATE OF IDAHO, SETTING STANDARDS FOR SEWER SERVICE CONNECTIONS AND PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, the Mayor and City Council have determined that it is necessary to establish standards for installation, maintenance, repair and reporting of a user's sewer service connection in order to safely and efficiently provide sewer services; and

**WHEREAS**, Ordinance No. 163 provides that the city may set standards and these standards shall be adopted by resolution.

**NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF DOVER, BONNER COUNTY, IDAHO THAT:**

**SECTION 1: SEWER SERVICE CONNECTION STANDARDS**

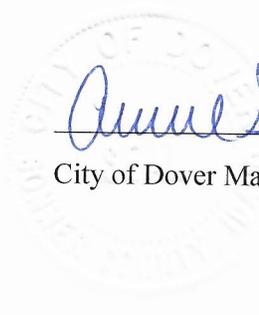
The city hereby adopts the City of Dover Septic Tank Standards set forth in Exhibit A of this resolution.

**SECTION 2: EFFECTIVE DATE**

This resolution shall be in full force and effect after its passage and approval.

**FURTHERMORE:** Resolution #118 is hereby rescinded.

**PASSED** by the City Council and **APPROVED** by the Mayor this 29<sup>th</sup> day of August, 2019.

  
Annie Shaha  
City of Dover Mayor, Annie Shaha

Michele Hutchings  
Attest: Michele Hutchings, City Clerk

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
5780 S. UNIVERSITY AVENUE  
CHICAGO, ILLINOIS 60637

RECEIVED



## EXHIBIT A City of Dover Septic Tank Standards

### 1. GENERAL

The City of Dover operates a septic tank effluent collection system that conveys wastewater to the treatment plant for additional treatment, disinfection and disposal. Therefore, the City relies on septic tanks to provide primary treatment. Adequate primary treatment is necessary to protect the functionality of the wastewater treatment plant. To that end, these standards require that:

- A Septic tanks function adequately to provide primary treatment.
  - 1) The tank will need to be sized properly
  - 2) Inlet and outlet baffle will need to be installed properly to function well
- B Septic tanks are inspected and maintained regularly to ensure proper functionality.
  - 1) The City will inspect the septic tank periodically and remove the accumulated solids every 5 years or when needed. If the accumulated solids have to be removed more frequently than once in five years, the owner will be charged for the extra solids removal.
  - 2) Upon inspection the owner will need to comply with any maintenance activity required. Typical maintenance activities the owner may be responsible for include (but not limited to):
    - (a) Clean and/or repair baffles
    - (b) Repair any seals to ensure the septic tank is watertight
    - (c) Complete necessary repairs to pressure pump system
- C Components used during construction are adequate to function properly throughout the expected life cycle. The owner is responsible for functionality of all components of the service connection from the house to the sewer main. It is in the owner's interest to install adequate components.
- D New construction or significant modifications be inspected by City staff prior to being buried to ensure facilities can adequately provide primary treatment.

### 2. SUBMITTALS FOR REVIEW

- A Site Plan showing location of property lines, buildings, driveways, septic tank, pump vault, control panel, pipe runs, connections, clean-outs, valves, control points, and invert elevations
- B Product Data: Provide product data for tank, risers, riser lids, baffles, pump, piping, and pipe accessories.
- C Manufacturer's Operation and Maintenance Manual and special procedures required to install.
- D Products Certificates that ensure products meet or exceed specified requirements.
- E Public works contractor with correct license categories, proof of insurance, etc.

### 3. SUBMITTALS AT PROJECT CLOSEOUT

- A Record drawings showing location of property lines, buildings, driveways, septic tank, pump vault, control panel, pipe runs, connections, clean-outs, valves, control points, and invert elevations.
- B Record drawing identifying, indicating, and describing unexpected variations to subsoil conditions or discovery of uncharted utilities.

#### 4. REGULATORY REQUIREMENTS

- A All construction shall be in accordance with **Idaho Standards for Public Works Construction** current edition.
- B Conform to applicable Idaho code for materials and installation of the Work of this section
- C Conform to City of Dover Standards for the installation of all materials. In case of conflict between the several parts of these specifications, the most stringent specifications shall govern as determined by the Engineer. Where these specifications refer to recognized standards, such as ASTM, Federal Specifications, NFPA, etc., the reference specifications shall be to the latest edition unless specified otherwise
- D Proof of completed inspections and compliance with items identified during inspections.
- E Commercial connections shall comply with the Uniform Plumbing Code for sizing of the effluent lines and septic tanks.

#### 5. Septic Tanks

##### A General:

- 1) Septic tanks shall be one-piece tanks with one-piece lids and (see Figure 1 and 2):
  - (a) Have cast in place riser rings and 24" PVC risers,
  - (b) Have a 24" diameter access opening above the inlet baffle,
  - (c) Have at least an 8" diameter access opening above the outlet baffle if dual compartment tank is installed, or a second 24" diameter access opening above the outlet baffle if single compartment tank is installed
  - (d) Have a 24" diameter access opening above the pump chamber,
  - (e) 4" schedule 40 inlet and out let baffles, or equivalent bolt-to-the-wall type,
  - (f) Have watertight joints: lid sealed with mastic and pipe penetrations sealed with hydraulic cement, or cast-in-place high-strength boot with SS band clamp, sealed access openings and sealed risers with bolt down lids,
  - (g) Locatable and accessible for inspection and routine maintenance,
  - (h) Be installed per manufactures recommendations,
  - (i) Be located on-site with set-backs per Panhandle Health District.

##### B Gravity Systems:

- 1) 1000 gallon (minimum) one-piece concrete tank or as required by Panhandle Health District for greater than 4 bedrooms,
- 2) See Figure 1 for Details

##### C Pressure Systems:

- 1) 1500 gallon one-piece, two chamber, concrete tank (1000 gallon septic tank chamber and 500 gallon pump chamber) or as required by Panhandle Health District for greater than 4 bedrooms,
- 2) See Figure 2 for Details
- 3) Goulds WE0512H Pump or WE0512HH Pump, as needed to discharge into the pressure collection system with waterproof splices in riser, control panel,

- 4) 2 float switches to control the pump
  - (a) On/off float
  - (b) High level alarm
- 5) 1-1/4" (minimum) Underground conduit with complete set of active wires and spare wires for standby.
- 6) Appurtenant and Ancillary equipment necessary and as needed to properly install equipment per manufactures recommendation, outfit, and connect the pump station.

## 6. EFFLUENT LINE

### A Gravity Systems:

- 1) Pipe from house to septic tank 4" ABS (gravity flow), or equal. Installations within the 100 year flood zone shall be designed by a qualified licensed professional to ensure compliance with Federal Emergency management Agency Bulletin FEMA P-348, Protecting Building Utility Systems from Flood Damage (2017), Edition 2/February 2017, (or current edition).
- 2) Pipe from septic tank to main, 4" Class 160 PVC with Sched 40 fittings
- 3) Cleanout per 100 feet of pipe run, 1 minimum required
- 4) Magnetic green sewer locate tape 6" above pipe and 12 gauge solid tracer-wire with green insulation to be placed at top of pipe.
- 5) Main Line Connection: GPK Gasketed PVC Saddle with Neoprene Gasket or pre-approved equivalent, with stainless steel straps and bolts, size as required.
- 6) See Figure 1 for additional detail
- 7) Construction in public right-of-way by public works licensed contractor
- 8) Installation per ISPWC

### B Pressure Systems

- 1) Pipe from house to septic tank 4" ABS (gravity flow), or equal in accordance with the Uniform Plumbing Code in effect at time of installation or modification. Installations within the 100 year flood zone shall be designed by a qualified licensed professional to ensure compliance with Federal Emergency management Agency Bulletin FEMA P-348, Protecting Building Utility Systems from Flood Damage (2017), Edition 2/February 2017, (or current edition).
- 2) Magnetic green sewer locate tape 6" above pipe and 12-gauge solid tracer-wire with green insulation to be placed at top of pipe.
- 3) Force Main:
  - (a) Two stainless steel swing check valves shall be installed between the pump and the curb stop (at the property line) to protect against backflow from City's high-pressure system. One check valve shall be installed near the pump. The other check valve's preferred location is near the curb stop; however, if that location is inaccessible, the other check valve could be installed in the septic tank near the wall with prior City approval.
  - (b) A 1/8" hole in the force main about 6" above pump should be drilled to prevent "air locking" after servicing pump.
- 4) Construction in Public right-of-way by public works licensed contractor.
- 5) Installation per ISPWC
- 6) Main Line Connection shall be a Saddle tap Romac Double Stainless Steel Strap Saddle or approved equal.

- 7) Corporation stop with pack joint adapter shall be brass or stainless steel or approved equal.
- 8) 1-1/2" Brass Curb stop with pack joint assembly and cast iron riser stop with "SEWER" labeled lid shall be installed in the force main near the property line.
- 9) See Figure 2 for additional details

## 7. LOCATION AIDS (TRACE WIRE AND TAPE):

- A 12-gauge, solid copper with green insulation locate wire shall be placed on all pipe runs and the septic tank from the house cleanout, over the center line of the septic tank (one wrap around each riser) to the curb stop (pressure systems) to the main line.
- B Locate wire shall have the ends accessible for use at:
  - 1) The house cleanout and
  - 2) The curb stop (pressure systems)
  - 3) Near property in a capped stand pipe or cleanout as applicable
- C Seal ends of wire and all splices with waterproof splice connectors
- D Magnetic detectable conductor, green colored, plastic coated sewer tape shall be placed 6 inches over the top of all pipe runs.

## 8. INSTALLATION

- A Bedding per ISPWC. Excavated material may be suitable or made suitable by screening, sifting, or manually sorting.
- B The laying of sewer pipe shall be accomplished only after the trench has been dewatered and 4" of bedding has been prepared in accordance with specifications.
- C Care shall be taken to avoid contamination, by dirt or any other unapproved materials, of the pipe interior or joint surfaces. Water shall not be allowed to flow down the pipe, unless approved as part of the dewatering plan.
- D If groundwater is encountered during pipe installation, a dewatering plan shall be utilized to maintain the water level below the trench bottom before proceeding with laying of pipe.
- E Seal joints watertight
- F Gravity flow pipe shall be laid at a minimum grade of 1/4" fall per foot of run
- G Coordinate the work with termination of sanitary sewer connection to municipal sewer utility service and trenching
- H Maximum deflection from line and grade show on the plans is 3/8" of an inch per any section of pipe.
- I Cleanouts are required every 100 feet or as required by the Uniform Plumbing Code.
- J Septic Tanks and Vaults shall be sealed against leakage by cast in place high strength boot or non-shrink grout that matches the temperature coefficients of the concrete. Acceptable Products include:
  - 1) Flexcrete Fastfill / Reinforced Comprotec Elastomeric / FC1 & FC2 Systems
  - 2) Tamms Hey'DI K-11

## 9. SEPARATION AND SETBACKS OF UTILITIES

- A The requirements for the separation of water mains and any sanitary or storm sewer lines/appurtenances shall be specified in the Idaho Standards for Public Works Construction, Section 406 - "Separation of Water Mains and Sewers."
- B The septic tank shall be setback per Panhandle Health District Requirements, which in general are:
  - 1) 5 feet from the building foundation
  - 2) 100 feet from a public well
  - 3) 50 feet from a private well
  - 4) 50 feet from surface water
  - 5) 5 feet from a property line
  - 6) 2 feet from seasonal high-water level

## 10. INSPECTION, CONSTRUCTION

- A Inspections shall be made prior to final backfill while the subject of the inspection is exposed. A record of inspections will be logged using the "City of Dover Sewer Service Connection Inspection Report" recorded by the City. A complete inspection report is required prior to issuance of the certification of occupancy.
- B The following require inspection:
  - 1) Connection to City main sewer line.
  - 2) Pipe from main line connection to septic tank including the curb stop if applicable
  - 3) Tank penetrations
  - 4) Tanks set and risers and riser connections
  - 5) Pump and related plumbing
  - 6) Septic Tank baffles
  - 7) Locate wire
- C Request inspection prior to installation of septic tank and prior to final backfill of pipe.
- D Pressure Systems will require an inspection of the pump components installation.
- E If work does not meet specified requirements, the work will have to be brought up to standards.

## 11. FINAL CONNECTION

- A Gravity System: The system will be deemed to be connected when the connection to the main line is made.
- B Pressure System: The system will be deemed to be connected when the connection to the main line is made. The force main valve to City Sewer will be opened by a city representative after final inspection

## 12. INSPECTION, WHILE IN SERVICE

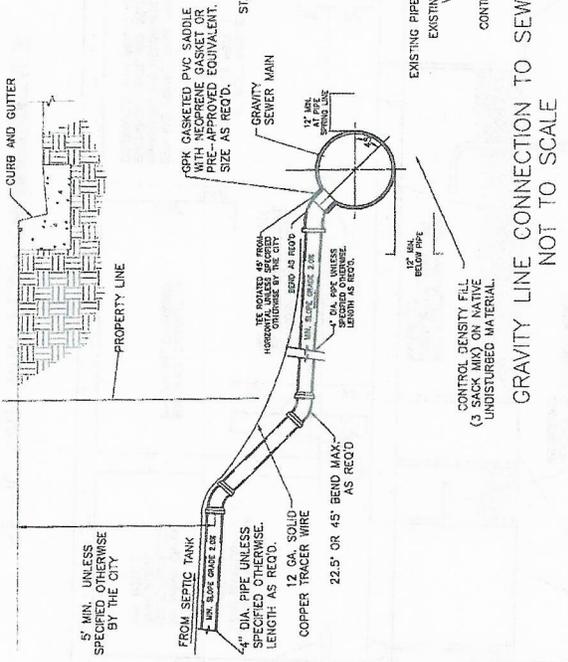
- A Regularly scheduled septic tank inspections shall be performed by the City through persons permitted by the State of Idaho Department of Environmental Quality to manage septage to ensure the proper functionality of the septic tank.

- B Persons inspecting septic tank shall use, follow and fill out the "City of Dover Septic Tank Inspection Form" provide by the City.
- C Septic tanks with accumulated floating scum and/or accumulated settled solids greater than 35% of the usable volume shall be cleaned by emptying the tank. Tank contents must be managed by persons permitted by the State of Idaho Department of Environmental Quality.
- D Debris accumulation on or near the baffles shall be cleaned by clearing away and cleaning and/or repairing the baffles. Tank contents must be managed by persons permitted by the State of Idaho Department of Environmental Quality.
- E Septic tanks found to be leaking and/or with leaking pipe penetrations shall be repaired.
- F The City may inspect any septic tank to ensure functionality at any time at City's expense. Operational issues discovered during a City inspection shall be addressed and/or repaired at owner's expense.



NO.	DATE	DESCRIPTION

1. A MINIMUM OF TWO (2) STAINLESS STEEL (SERIES 300 OR BETTER) THREADED STRAPS CAPABLE OF A MINIMUM OF 60 LBS. TORQUE SHALL BE USED TO SECURE SADDLE TO PUBLIC SEWER MAIN. GULIED OR CEMENTED SADDLES WILL NOT BE ALLOWED.
2. ALL TAPS INTO EXISTING PUBLIC SEWER MAIN MUST BE "BREAK-IN" OR HAMMERING TAPS WILL BE ALLOWED. PRESENT CORE COUPON FOR INSPECTION AS REQD.
3. UNLAP EXISTING PUBLIC SEWER MAIN AND NEWLY INSTALLED SADDLE. UNLAP LONG CONTROL DENSITY STAINLESS STEEL STRAPS (3 SACK MIX) WITH NEOPRENE GASKET OR PRE-APPROVED EQUIVALENT. SIZE AS REQD. BETTER. (2 TYP)



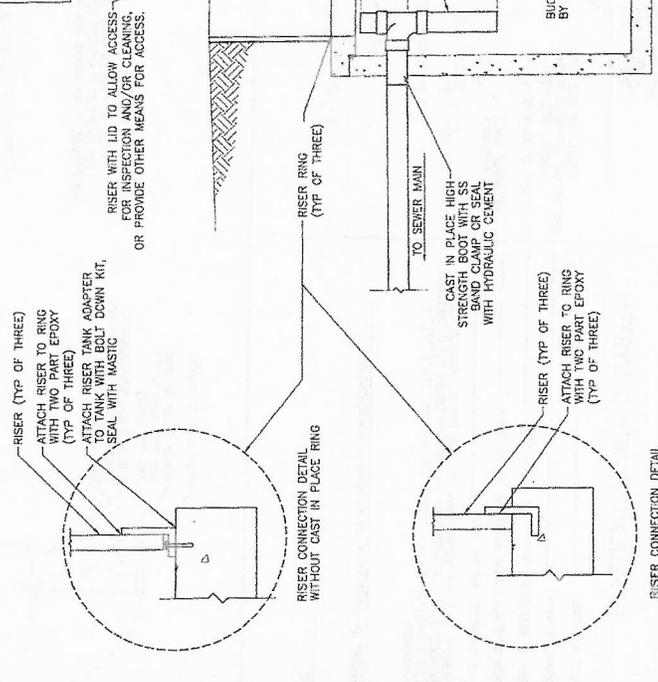
**GRAVITY LINE CONNECTION TO SEWER MAIN DETAILS**  
**NOT TO SCALE**

**BUILDING PERMIT #** \_\_\_\_\_  
**EFFLUENT GRAVITY SYSTEM**

PROJECT ADDRESS: \_\_\_\_\_  
 LANDOWNER'S NAME: \_\_\_\_\_  
 NUMBER OF BEDROOMS SERVED BY SEPTIC TANK: \_\_\_\_\_  
 NUMBER OF STRUCTURES SERVED BY SEPTIC TANK: \_\_\_\_\_  
 SIZE OF PROPOSED SEPTIC TANK: \_\_\_\_\_

I CERTIFY THAT THE SEPTIC TANK FOR THE STATED ADDRESS WILL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DOVER IDAHO GRAVITY FLOW STANDARDS AND IN ACCORDANCE WITH THE CITY'S TITLE 8 STANDARDS.

SIGNATURE OF LANDOWNER OR AUTHORIZED REPRESENTATIVE \_\_\_\_\_  
 DATE \_\_\_\_\_



**SEPTIC TANK WITH GRAVITY FLOW DETAILS**  
**NOT TO SCALE**



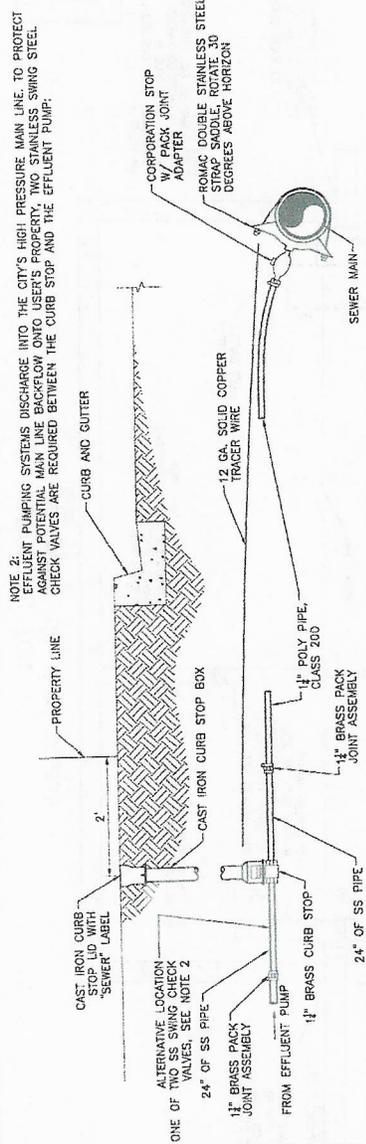
NOTE 1:  
 BAFFLE MAY BE BOLT-TO-WALL TYPE IF SUBMERGED DIMENSION IS SIMILAR AND BAFFLE IS OBSERVABLE FROM GROUND LEVEL VIA RISER

**Dated 11-02-2017**

BUILDING PERMIT # \_\_\_\_\_  
 EFFLUENT PUMPING SYSTEM

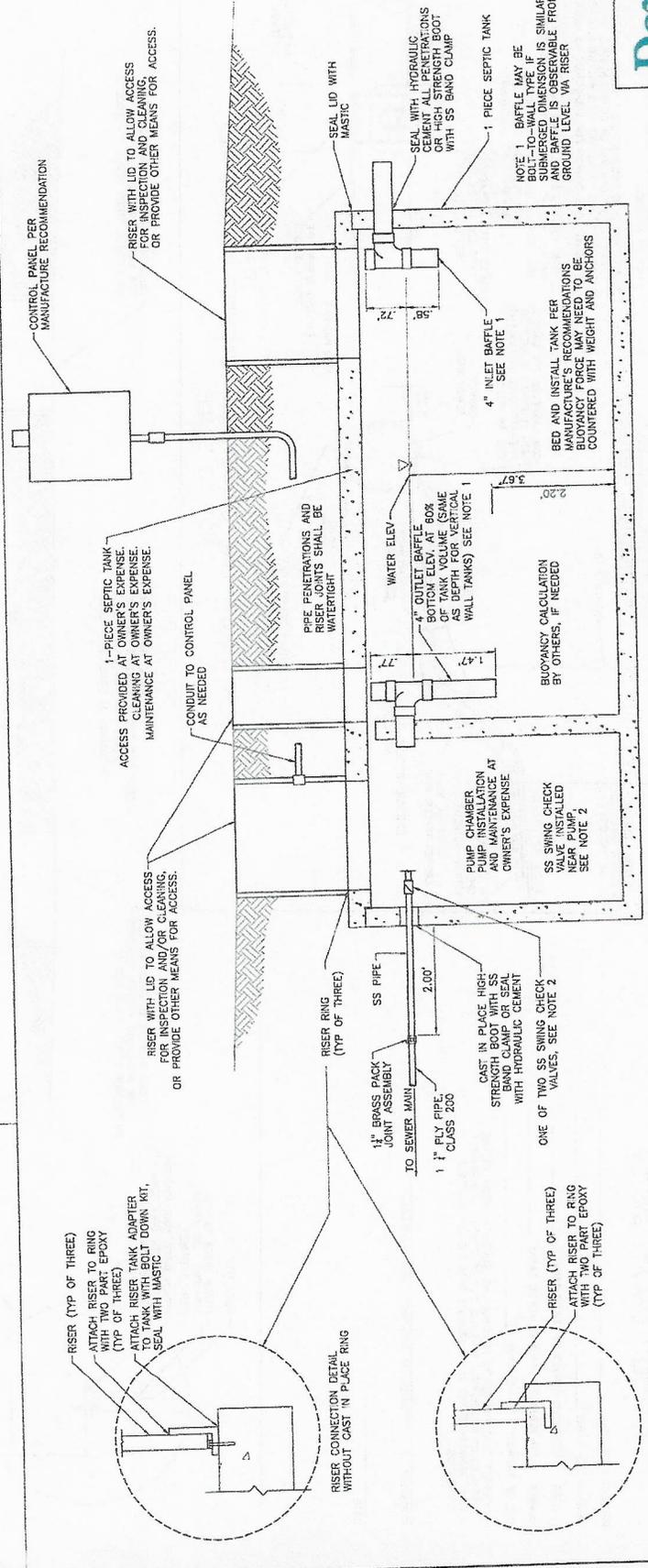
PROJECT ADDRESS: \_\_\_\_\_  
 LANDOWNER'S NAME: \_\_\_\_\_  
 NUMBER OF BEDROOMS SERVED BY SEPTIC TANK: \_\_\_\_\_  
 NUMBER OF STRUCTURES SERVED BY SEPTIC TANK: \_\_\_\_\_  
 SIZE OF PROPOSED SEPTIC TANK: \_\_\_\_\_  
 I CERTIFY THAT THE SEPTIC TANK FOR THE STATED ADDRESS WILL BE  
 INSTALLED IN ACCORDANCE WITH THE CITY OF DOVER EFFLUENT PUMPING  
 FLOW STANDARDS AND IN ACCORDANCE WITH THE CITY'S TITLE B  
 STANDARDS.

SIGNATURE OF LANDOWNER OR AUTHORIZED REPRESENTATIVE: \_\_\_\_\_  
 DATE: \_\_\_\_\_



NOTE 2: EFFLUENT PUMPING SYSTEMS DISCHARGE INTO THE CITY'S HIGH PRESSURE MAIN LINE TO PROTECT AGAINST POTENTIAL MAIN LINE BREAKDOWN ON USER'S PROPERTY. TWO STAINLESS SWING STEEL CHECK VALVES ARE REQUIRED BETWEEN THE CURB STOP AND THE EFFLUENT PUMP.

FORCE MAIN CONNECTION TO SEWER MAIN DETAILS  
 NOT TO SCALE



SEPTIC TANK WITH PUMP CHAMBER DETAILS  
 NOT TO SCALE

Dated 11-02-2017

**JUB ENGINEERS, INC.**  
 109 North 1st Ave.  
 Suite A  
 Sandpoint, ID 83864  
 Phone: 208.263.6212  
 Fax: 208.263.6212  
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NO.	DATE	DESCRIPTION

**CITY OF DOVER IDAHO**  
 SEWER STANDARDS  
 SEPTIC TANK  
 EFFLUENT PUMPING SYSTEM

FIGURE 2  
 SHEET NUMBER