

ORDINANCE NO. 8

AN ORDINANCE REGULATING THE INSTALLATION, CONSTRUCTION, EXTENSION, AND REPAIR OF INDIVIDUAL WATER SUPPLY SYSTEMS; REQUIRING PERMITS FOR, PROVIDING FOR, INSPECTION AND PRESCRIBING PENALTIES FOR NON-COMPLIANCE.

THE TOWN OF GREY CLOUD ISLAND ORDAINS:

Section 1.

1.1 Before proceeding with the construction of a new well or any major reconstruction (deepening of an existing well to the next deeper strata) the Owner or his agent shall first obtain a permit for such purposes from the Town Board and shall pay a fee of Five Dollars (\$5.00).

1.2 Applications for permits shall be made in writing upon printed forms furnished by the Town Clerk for such purposes.

1.3 Each water supply system shall be so located and constructed so that it will not be contaminated by any existing or future sewage disposal system. It shall also be constructed to minimize the possible contamination of the well from all possible external sources within the geological strata surrounding the well.

1.4 Wells shall be located in a manner to be free from flooding and the top shall be so constructed and located as to be above all possible sources of pollution. No well shall be located closer than three (3) feet to the outside basement wall of a dwelling. The outside basement footing shall be continuous across the opening of the well alcove. No well shall be located closer than twenty-five (25) feet from a property line. The following minimum distances between a well and possible sources of contamination shall be complied with:

1.4(1) Buried or concealed extra heavy cast iron sewer or drain lines with lead caulked, air-tested joint - 20 feet.

1.4(2) Vitrified clay or concrete sewers (or cast iron sewers not of construction designed above, septic tanks, or drain fields, 50 feet.

1.4(3) Dry wells, seepage pits, cess pools - 75 feet.

1.5 No well shall hereafter be installed in a pit below the surface of the ground unless such well pit is an alcove opening directly into the main basement area of the building being served by the well. The well pit floor shall be constructed according to the requirements of pump room floors outlined in this ordinance.

1.6 No well constructed in the Town of Grey Cloud shall terminate in the unconsolidated surface mantle (drift) or Shakopee-Oneota Dolomite. No existing well shall be increased in depth to terminate in those formations.

1.7 The minimum diameter of any finished well casing shall be four (4) inches.

All wells shall be drilled to terminate in the Jordan Sandstone, or in formations below it, and

Shakopee Oneota formations shall be sealed off. In the case of a well finished at a diameter of 4 inch, this shall be accomplished by installing a minimum 8 inch diameter casing from the surface through the drift and into Shakopee Dolomite. A nominal 8 feet (minimum) open hole shall then be drilled through the undesirable formations and at least 20 feet into the continuous non-faulty consolidated Jordon Sandstone and/or at least 20 feet below the pumping water level, whichever is lower. A minimum 4 inch liner shall then be installed and centered with guides from the surface to the bottom of the 8 inch hole, and the annular space between the liner and the cased and encased 8 inch hole shall be filled with cement grout. Grouting shall be from bottom to top and shall be performed in one continuous operation and in such manner as to accomplish complete filling of the annular space. After the grout has set at least 72 hours, the nominal 4 inch open hole shall be continued into the water bearing formation such distance as is necessary to provide the required water supply. IN case of wells larger than 4 inches, all other component parts of the well shall be constructed proportionately. Grout shall consist of Portland cement and water combined in the ratio of one sack of cement to 4½ to 5½ gallons of water or in cases where abnormal loss of grout to crevices occurs, of Portland cement, clean sand and water combined in the ratio of one part cement, one part sand, and 4½ to 6 gallons of water per sack of cement.

1.8 All wells for domestic use, hereafter constructed in the Town of Grey Cloud, shall produce a minimum initial supply of 900 gallons of sand-free water per hour.

1.9 The pump and equipment shall be installed in a manner satisfactory to the Town of Grey Cloud Island and shall conform to the following:

1.9(1) Pump and equipment shall be designed to assure a pollution-proof and frost-proof installation.

1.9(2) The pump base shall be constructed so as to permit installation of a water-tight mounting.

1.9(3) A well seal shall be used. Such well seal shall be of simple construction, easily installed, removed and reinstalled should it become necessary to remove the drop pipe for repair.

1.9(4) Where a well head is housed in an alcove of the main basement, the top of the well casing shall be a minimum of 18 inches above the basement floor level and the seal shall be so constructed and installed as to maintain its water-tight feature, should flooding occur. The alcove floor shall be at least six inches above the basement floor and the concrete alcove cover shall be minimum four inches above grade at the edge.

1.9(5) Where a well is located other than in a basement alcove, the well casing shall extend at least 12 inches above established ground level and shall be surrounded by a concrete platform or pump room floor which is at least flush with and preferably four inches above ground level at the edges and sloped to drain from the well; (provided that where extension of the well casing above ground level would seriously detract from the usefulness or appearance of property, the wellhead may be surrounded by a concrete housing, the top of which is flush with the surface of the ground, and the bottom of which is not more than 18 inches below ground level. The housing shall be constructed with completely water-tight walls, floor and cover, except that where the ground at the well site is not level, the housing shall be uncovered and the floor shall be extended and sloped for free surface drainage at the down-slope edge).

1.9(6) Suction lines installed through the well casing, or where otherwise installed less

than 10 feet below grade, shall be provided with an outline protective casing. Such protecting casing shall be set watertight into the well casing. The suction line shall be caulked into the protective casing to provide a watertight joint which will permit easy removal. The suction line shall slope upward toward the pump. Where a suction line is brought into a basement from a well located some distance from the basement, the pump shall be located at least 18 inches above the basement floor.

1.9(7) Provisions shall be made in the well seal for future measurements of static and pump levels.

1.10 After final installation of the pumping equipment, the well shall be pumped continuously until the water is free of turbidity, then chlorinated heavily in accordance with the following procedures:

1.10(1) Introduce into the well one gallon of standard laundry bleach (at least 5¼ percent hypochlorite) mixed with five gallons of water in such manner as to washdown the inside of the casing and the outside of the drop pipe.

1.10(2) Allow the chemical to remain in the well for at least twelve hours, then pump to waste until the odor and taste of the chemical have practically disappeared.

1.10(3) Wells larger than four inches in diameter require proportionately larger doses of the chemical for chlorination but shall not have a concentration of applied solution less than 150 parts per million for twelve hours.

1.11 All commercial wells shall comply with the requirements of the Minnesota State Department of Health for public water supplies.

1.12 Upon completion of drilling a well, a pumping test of sufficient duration to determine the yield and maximum draw down shall be conducted. Within fifteen days after inspection of the well, the permit holder shall file an affidavit with Town Clerk setting forth the results of the pumping test, the capacity of the well, the pumping level, and the depth of the casing from grade.

A geological log of the formations encountered in drilling each well shall be kept by the driller. A copy of said log, typed on 8½ x 11 paper shall be filed along with the well affidavit and such log shall specifically state where impervious formation is encountered. Failure to provide such a log or affidavit, or wilful failure to provide accurate information with respect thereto shall constitute a violation of this ordinance.

1.13 The construction of a well for the purpose of disposing of any liquids, including surface waters, air conditioning or commercial wastes shall be prohibited in the Town of Grey Cloud.

Section 2.

This ordinance and each of the separate provisions thereof have been enacted for the benefit and protection of property owners as well as the public. Each and every contract for the performance of work of a type regulated by this ordinance shall by implication include a covenant on the part of the one who is to perform the work that, except to the extent that compliance with this ordinance has been modified or waived, the work shall be performed strictly in accordance with the applicable provisions of this ordinance.

Section 3.

Any person, firm or corporation violating any of the provisions of this ordinance shall be guilty of a misdemeanor, and upon conviction thereof shall be fined in an amount not to exceed \$100.00 or imprisoned for not to exceed 90 days. Each day that any violation is continued shall constitute a separate offense.

Passed by the Board of Township Supervisors this 1st day of April, 1960.

/s/ Carroll J. O'Boyle, Chairman
/s/ Arthur J. Johnson
/s/ Richard A. Pinska

Attest: Richard E. Mullen, Clerk