

ORDINANCE NO. 87-3

AN ORDINANCE AMENDING THE HILLTOWN TOWNSHIP SUBDIVISION ORDINANCE, ENACTED AND ORDAINED JUNE 22, 1981, AS AMENDED: SPECIFICALLY AMENDING SECTION 512, PUBLIC WATER SUPPLY SYSTEMS AND COMMUNITY WATER SUPPLY AND DISTRIBUTION SYSTEMS AND SECTION 513, ON-LOT WATER DISTRIBUTION SYSTEMS.

The Hilltown Township Board of Supervisors, upon review by the Bucks County Planning Commission and the Hilltown Township Planning Commission, hereby ENACTS AND ORDAINS the following Ordinance:

The Hilltown Township Subdivision Ordinance shall be hereby amended to revise and replace Section 512 and Section 513 with the following sections:

SECTION 512 WATER RESOURCES IMPACT STUDY

Hilltown Township is located within the Southeastern Pennsylvania Groundwater Protected Area of the Delaware River Basin Commission (DRBC). All projects withdrawing 10,000 gpd or greater of groundwater or surface water or a combination of these two sources are required to obtain a permit from the DRBC. Copies of all submissions by the applicant to the DRBC shall be sent to the Township. Additionally, copies of all submissions to the Department of Environmental Resources (DER) and all correspondence received by the applicant from the DER shall be forwarded to the Township.

Any water withdrawal project not under the jurisdiction of the DRBC will be reviewed by the Township. A water impact study is required for all major subdivisions and all wells intended for non-residential use (i.e. industrial, commercial, community, agriculture) unless waived by the Board of Supervisors. The water impact study shall be prepared by a hydrologist or professional engineer qualified to conduct groundwater investigations. The purpose of the study will be to determine if there is an adequate supply of water for the proposed use and to estimate the impact of the additional water withdrawals on existing nearby wells, underlying aquifers and streams. The Township Engineer shall be involved in the study as the Township feels is necessary and appropriate.

A water system which does not provide an adequate supply of water for the proposed use, considering both quality and quantity, adversely affects nearby wells and streams, or does not provide for adequate groundwater recharge considering withdrawals shall not be approved by the Township.

The adequacy of water supply shall be determined based upon the assumption that there are 3.5 persons per dwelling unit using 75 gallons of water per person per day. The applicant shall submit an analysis which evaluates the consistency between the proposed use and the groundwater preservation guidelines included in the Townships Sewage Facilities Plan/201 Facilities Plan.

1) The water impact study shall be signed by the person(s) preparing the study and shall include the following information:

a) Calculations of the projected water needs using the criteria set forth in the following references:

1) PUBLIC WATER SUPPLY MANUAL, Bureau of Water Quality Management Publication No. 15 by the Pennsylvania Department of Environmental Resources, Harrisburg, Pennsylvania.

2) GUIDE FOR DETERMINATION OF REQUIRED FIRE FLOW by the Insurance Services Office (ISO) as modified.

3) AMERICAN WATER WORKS ASSOCIATION Standards and Manuals for the American Water Works Association, Denver, Colorado.

b) A geologic map of the area within a 1.0 mile radius of the site.

c) The location of all faults, lineaments and fracture traces within 1/4 mile of the site.

d) The locations of all existing and proposed wells within 1/4 mile of the site, and all large withdrawal wells (10,000 gpd +) within 1.0 mile of the site.

e) The location of all existing and proposed on-lot septic systems within 1/4 mile of the site.

f) The location of all streams, perennial and intermittent, within 1/4 mile of the site.

g) A discussion of the aquifers underlying the site and their long-term drought recharge capability based on accepted published data or detailed site specific investigations.

h) Based on the drought recharge capability of the underlying aquifer and the calculated daily groundwater withdrawals of the project, a hydrologic budget shall be calculated for the site property itself, and for the area within 1/4 mile of the site.

i) Based on the results of the hydrologic budget, a determination shall be made on whether or not the potential exists for adverse affects on the hydrologic environment caused by the project.

j) The study shall include a brief statement of the qualifications of the person(s) preparing the study.

2. The following additional requirements shall apply to projects that would use more than a typical residence, unless waived by the Township.

a) For each well that is constructed:

1) An accurate geologic log should be constructed during the drilling of the well giving a detailed description of the type and thickness of rocks encountered. Additionally, the log should contain information on the depth and thickness of all water bearing zones encountered and the yield from each zone. Yield from the well must be measured using a quantitative method.

2) Samples shall be collected every 20 feet during drilling, or at each change in rock type. Each sample shall be placed in a non-breakable container. The container, in a sturdy box, shall be made available to the Township.

b) A pumping test of not less than 48 hours duration shall be conducted at a rate of not

less than 150% of the intended long-term withdrawal from the well. The 48 hour test shall be conducted at a constant pumping rate that should not deviate greater than +/- 5% during the test.

c) In order to determine the impact of the project well on existing wells, a representative sample of existing wells, evenly spaced around the pumping well, shall be monitored for changes in water level.

The number and location of monitoring wells shall be subject to approval by the Township. Sufficient well monitoring shall be performed to allow for the construction of hydrographs showing a continuous record of well levels before, during and after the pumping test.

d) A means of accurately measuring the well discharge shall be provided subject to approval by the Township.

e) Well discharge shall be directed away from the site by a method suitable to the Township and to a point suitable to the Township.

f) Records shall be compiled in typewritten form to include the following information:

1) Name of driller and personnel conducting test.

2) Description of test well to include horizontal and vertical dimensions, casing installed and grouting details.

3) List of formation samples.

4) Static water level immediately prior to yield testing.

5) Hydrograph of depth to water surface during test pumping and recovery period at the test well showing corresponding pump and discharge rate in gallons per minute and time readings were taken.

6) Log of depth to water surface at existing and monitoring wells during test pumping period showing time readings were taken.

g) A report shall accompany the test well data which analyzes and interprets all of the data as to the impacts on the groundwater supply and existing wells.

Conclusions shall be drawn from the analysis. The credentials of the individual(s) preparing the report shall be included.

h) The submission to the Township shall include any and all applications, reports, or supplemental information submitted to the Pennsylvania Department of Environmental Resources and/or the Delaware River Basin Commission.

SECTION 513A. PUBLIC AND COMMUNITY WATER SUPPLY AND DISTRIBUTION SYSTEMS

a) On the recommendation of the Hilltown Township Planning Commission and/or Hilltown Township Water and Sewer Authority, all major subdivisions in which the smallest created lot is less than five (5) acres in size, shall be required to be provided with public or community water supply and distribution systems, designed and constructed to Hilltown Township Water and Sewer Authority specifications, if mandated by the Board of Supervisors.

b) All community water supply and distribution systems shall be offered for dedication to the Township and/or appropriate Water Authority having jurisdiction in the area of subdivision. In the event Township and Authority refuse acceptance, ownership and operation shall be maintained by a homeowner's association in a manner acceptable to the Township.

c) Water mains shall be constructed by the developer in such a manner as to make adequate water service available to each lot, building or dwelling unit within the subdivision. A minimum pressure of thirty-five (35) pounds per square inch shall be provided at each house or other building to be connected to the water supply main. The water supply must comply with regulations and standards of the State Department of Environmental Resources.

d) The system shall also be designed with adequate capacity and appropriately spaced fire hydrants for fire fighting purposes as determined by the Township.

e) Water Impact Study. A water impact study pursuant to Section 512 shall be required for all community water supply and distribution systems wherein a new water supply source is proposed to be developed.

SECTION 513B. INDIVIDUAL ON-LOT WELLS

Where individual on-lot wells are proposed, conformance to requirements of Ordinance No. *87-2*, adopted *May 5* *1987*, shall be required.

ORDAINED AND ENACTED into Ordinance this *5th* day of *May*, A.D., 1987.

HILLTOWN TOWNSHIP  
BOARD OF SUPERVISORS

*Vincent P. Kelly*  
*Robert A. Kelly*  
*Betty J. Kelly*

Attest:

*Gloria G. Neiman*  
Gloria G. Neiman  
Township Secretary