

## DRAFT GROUNDWATER PROTECTION OVERLAY DISTRICT BYLAW

### 1. PURPOSE OF DISTRICT

The purpose of this Groundwater Protection District is to:

- a. promote the health, safety, and general welfare of the community by ensuring an adequate quality and quantity of drinking water for the residents, institutions, and business of the Town of Middleton and adjacent towns;
- b. preserve and protect existing and potential sources of drinking water;
- c. conserve natural resources in the Town of Middleton; and
- d. prevent temporary and permanent contamination of the environment.

### 2. SCOPE OF AUTHORITY

The Groundwater Protection District is an overlay district superimposed on the other zoning districts. This overlay district shall apply to all new construction, reconstruction, or expansion of existing buildings and new or expanded uses. Applicable activities and uses in a portion of one of the underlying zoning districts that fall within the Groundwater Protection District must additionally comply with the requirements of this bylaw. Uses prohibited in the underlying zoning districts shall not be permitted in the Groundwater Protection District.

### 3. DEFINITIONS

**AQUIFER:** A geologic formation composed of rock, sand or gravel that contains significant amounts of potentially recoverable water.

**CMR:** Code of Massachusetts Regulations.

**COMMERCIAL FERTILIZER:** Any substance containing one or more recognized plant nutrients which is used for its plant nutrient content and which is designed for use, or claimed to have value in promoting plant growth, except un-manipulated animal and vegetable manures, marl, lime, limestone, wood ashes, and gypsum, and other products exempted by state regulations.

**DISCHARGE:** The accidental or intentional disposal, deposit, injection, dumping, spilling, leaking, pouring, or placing of toxic or hazardous material or hazardous waste upon or into any land or water such that it may enter the surface or ground waters.

**GROUNDWATER PROTECTION DISTRICT:** The land area consisting of aquifers and Zone II recharge areas as identified on a map and adopted pursuant to this bylaw.

**HAZARDOUS MATERIAL:** Any substance in any form which because of its quantity, concentration, or its chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics, either separately or in combination with one or more substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment, when improperly stored, treated, transported, disposed of, used, or otherwise managed. Hazardous material includes, without limitation, synthetic organic chemicals, petroleum products, heavy metals, radioactive or infectious

materials, and all substances defined as toxic or hazardous under MGL c. 21E. This term shall not include hazardous waste or oil.

**HISTORICAL HIGH GROUNDWATER TABLE ELEVATION:** A groundwater elevation determined from monitoring wells and historical water table fluctuation data compiled by the United States Geological Survey.

**HAZARDOUS WASTE:** A substance or combination of substances, which because of quantity, concentration, or physical, chemical or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness or pose a substantial present or potential hazard to human health, safety, or welfare or to the environment when improperly treated, stored, transported, used or disposed of, or otherwise managed. This term shall include all substances identified as hazardous pursuant to the Hazardous Waste Regulations, 310 CMR 30.000.

**IMPERVIOUS SURFACE:** Material or structure on, above, or below the ground that does not allow precipitation or surface water runoff to penetrate into the soil.

**LANDFILL:** A facility established in accordance with a valid site assignment for the purposes of disposing solid waste into or on the land, pursuant to the Solid Waste Regulations, 310 CMR 19.006.

**MassDEP:** Massachusetts Department of Environmental Protection.

**MGL:** Massachusetts General Law.

**PETROLEUM PRODUCT:** Includes, but not limited to, fuel oil; gasoline; diesel; kerosene; aviation jet fuel; aviation gasoline; lubricating oils; oily sludge; oil refuse; oil mixed with other wastes; crude oils; or other liquid hydrocarbons regardless of specific gravity. Petroleum product shall not include liquefied petroleum gas including, but not limited to, liquefied natural gas, propane or butane.

**NON-SANITARY WASTEWATER:** Wastewater discharges from industrial and commercial facilities containing wastes from any activity other than collection of sanitary sewage including, but not limited to, activities specified in 310 CMR 15.004(6).

**OPEN DUMP:** A facility operated or maintained in violation of the Resource Conservation and Recovery Act 42 U.S.C. 4004(a)(b), or state regulations and criteria for solid waste disposal.

**RECHARGE AREAS:** Land areas, such as a Zone II, where precipitation and surface water infiltrates into the ground to replenish groundwater and aquifers used for public drinking water supplies.

**SEPTAGE:** The liquid, solid, and semi-solid contents of privies, chemical toilets, cesspools, holding tanks, or other sewage waste receptacles. This term shall not include any material that is a hazardous waste, as defined by 310 CMR 30.000.

**SLUDGE:** The solid, semi-solid, and liquid residue that results from a process of wastewater treatment or drinking water treatment including wastewater residuals. This term shall not include grit, screening, or grease and oil which are removed at the head-works of a facility

**TREATMENT WORKS:** Any and all devices, processes and properties, real or personal, used in the collection, pumping, transmission, storage, treatment, disposal, recycling, reclamation, or reuse of waterborne pollutants, but not including any works receiving a hazardous waste from off the site of the works for the purpose of treatment, storage, or disposal.

**UTILITY WORKS:** Regulated activities providing for public services, including roads, water, sewer, electricity, gas, telephone, transportation and their associated maintenance activities. This term shall include the installation of detention and retention basins for the purpose of controlling storm water.

**VERY SMALL QUANTITY GENERATOR:** Any public or private entity, other than residential, which produces less than 27 gallons (100 kilograms) a month of hazardous waste or waste oil, but not including any acutely hazardous waste as defined in 310 CMR 30.136.

**WASTE OIL RETENTION FACILITY:** A waste oil collection facility for automobile service stations, retail outlets, and marinas which is sheltered and has adequate protection to contain a spill, seepage, or discharge of petroleum waste products in accordance with MGL c.21. s.52A. .6

**ZONE II:** The delineated recharge area to a public drinking water well as approved by MassDEP and defined under the Massachusetts Drinking Water Regulations 310 CMR 22.00.7

#### 4. ESTABLISHMENT AND DELINEATION OF GROUNDWATER PROTECTION DISTRICT

For the purposes of this bylaw, there are hereby established within the Town of Middleton, certain groundwater protection areas consisting of aquifers or recharge areas. These areas are delineated on the Zoning Map, which is hereby made part of the Groundwater Protection District Bylaw and is on file in the office of the Town Clerk.

#### 5. DISTRICT BOUNDARY DISPUTES

5.1. If the location of the Groundwater Protection District in relation to a particular parcel is in doubt, resolution of the boundary dispute shall be through a Special Permit application to the Special Permit Granting Authority. Any application for a special permit for this purpose shall be accompanied by adequate documentation.

5.2. Burden of proof shall be upon the land owner to demonstrate that the location of the Groundwater Protection District with respect to a particular parcel(s) of land is uncertain. At the request of the land owner, the Town may engage a professional engineer, hydrologist, geologist, or soil scientist to determine more accurately the boundaries of the Groundwater Protection District with respect to a particular parcel(s) of land, and may charge the owner for the cost of the investigation. Changes to the Groundwater Protection District require town meeting approval.

#### 6. PERMITTED USES

6.1. All allowed activities and uses in a portion of one of the underlying zoning districts that fall within the Groundwater Protection District must additionally comply with the requirements of

this bylaw. This overlay district shall apply to all new construction, reconstruction, or expansion of existing buildings and new or expanded uses.

## 7. PROHIBITED USES

### 7.1. The following land uses and activities are prohibited unless designed in accordance with the specified performance standards:

- a. landfills and open dumps;
- b. automobile graveyards and junkyards;
- c. landfills receiving only wastewater residuals and/or septage, including those approved by MassDEP pursuant to MGL c. 21 s.26 through s.53, MGL c.111 s.17, and MGL c.83 s.6 and s.7; 10
- d. facilities that generate, treat, store, or dispose of hazardous waste that are subject to MGL c.21C and 310 CMR 30.000, except for:
  1. very small quantity generators as defined under 310 CMR 30.000;
  2. household hazardous waste centers and events under 310 CMR 30.390;
  3. waste oil retention facilities required by MGL c. 21, s.52A;
  4. water remediation treatment works approved by MassDEP for the treatment of contaminated waters.
- e. petroleum, fuel oil, and heating oil bulk stations and terminals including, but not limited to, those listed under North American Industry Classification System (NAICS) Codes 424710 and 454311, except for liquefied petroleum gas.
- f. storage of liquid hazardous materials and/or liquid petroleum products unless such storage is above ground level and on an impervious surface and either:
  1. in container(s) or above ground tank(s) within a building; or
  2. outdoors in covered container(s) or above ground tank(s) in an area that has a containment system designed and operated to hold either; 10% of the total possible storage capacity of all containers or 110% of the largest container's storage capacity, whichever is greater;however, these storage requirements shall not apply to the replacement of existing tanks or systems for the keeping, dispensing or storing of gasoline provided the replacement is performed in a manner consistent with state and local requirements;
- g. storage of sludge and septage, unless such storage is in compliance with 310 CMR 32.30 and 310 CMR 32.31;
- h. storage of deicing chemicals unless such storage, including loading areas, is within a structure designed to prevent the generation and escape of contaminated runoff or leachate;
- i. storage of animal manure unless contained within a structure designed to prevent the generation and escape of contaminated runoff or leachate;
- j. earth removal, consisting of the removal of soil, loam, sand, gravel, or any other earth material to within 4 feet of historical high groundwater as determined from monitoring wells and historical water table fluctuation data compiled by the United States Geological Survey, except for excavations for building foundations, roads, utility works or wetland restoration work conducted in accordance with a valid Order of Condition issued pursuant to MGL c. 131, s.40;15 and
- k. non-sanitary wastewater discharges from industrial and commercial facilities, except for:

1. replacement or repair of an existing treatment works that will not result in a design capacity greater than the existing treatment works;
2. treatment works approved by MassDEP designed for the treatment of contaminated ground or surface water and operating in compliance with 314 CMR 5.05(3) or 5.05(13); and
3. publicly owned treatment works.

- I. stockpiling and disposal of snow and ice containing deicing chemicals, if snow and ice is brought in from outside the Groundwater Protection District;
- m. storage of commercial fertilizers unless such storage is within a structure designed to prevent the generation and escape of contaminated runoff or leachate;
- n. Enlargement or expansion of existing structures or uses which are expressly prohibited above, including accessory structures or uses.

## 8. USES AND ACTIVITIES REQUIRING A SPECIAL PERMIT

### 8.1. The following uses and activities are permitted only upon the issuance of a Special Permit by the Special Permit Granting Authority (SPGA) under such conditions as they may require:

- a. Alterations that do not enlarge or increase a structure or use that does not conform to the Groundwater Protection District;
- b. except as prohibited under Section 7 of this bylaw, activities that involve the handling of toxic or hazardous materials in quantities greater than those associated with normal household use and which are permitted in the underlying zoning district;
- c. rendering impervious any lot or parcel more than 15% or 2,500 square feet, whichever is greater; unless artificial recharge, that will not degrade water quality, is provided using methods demonstrated to be capable of removing contaminants from storm water and which are consistent with methods described in MassDEP's Stormwater Handbook, Vol. I, II and III, as amended.
- d. change of an existing use expressly prohibited under Section 7 to another use which is expressly prohibited under Section 7.

## 9. PROCEDURES FOR ISSUANCE OF SPECIAL PERMIT

### 9.1. The Special Permit Granting Authority (SPGA) under this bylaw shall be the Board of Appeals.

### 9.2. The SPGA may grant the required special permit only upon finding that the proposed use meets the applicable general criteria found under Section 9.4 of the Zoning Bylaw and the specific criteria below. The proposed use must:

- a. in no way, during construction or thereafter, adversely affect the quality or quantity of the water supplies protected by the Groundwater Protection District; and
- b. be designed to avoid substantial disturbance of the soils, topography, drainage, vegetation, and other water-related natural characteristics of the site to be developed.

### 9.3. In addition to the plan requirements contained in Section 9.4 of the Zoning Bylaw, the applicant shall file a site plan and attachments that shall, at a minimum, include the following information where pertinent:

- a. a complete list of chemicals, pesticides, herbicides, fertilizers, fuels, and other potentially hazardous materials to be used or stored on the premises in quantities greater than those associated with normal household use; and
- b. for activities using or storing hazardous materials or wastes, a management plan shall be prepared and filed with the Fire Chief and Board of Health. The plan will be consistent with the requirements of Section 7 and shall include:
  1. provisions to protect against the discharge of hazardous materials or wastes to the environment due to spillage, accidental damage, corrosion, leakage, or vandalism, including spill containment and clean-up procedures;
  2. provisions for indoor, secured storage of hazardous materials or wastes with impervious floor surfaces;
  3. evidence of compliance with the Massachusetts Hazardous Waste Regulations 310 CMR 30.000; and

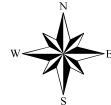
proposed down-gradient location(s) for groundwater monitoring well(s), should the SPGA deem the activity a potential groundwater threat.

## 10. ENFORCEMENT

- 10.1. Written notice of any violations of this bylaw shall be given by the Building Commissioner to the responsible person as soon as possible after detection of a violation or a continuing violation. Notice to the assessed owner of the property shall be deemed notice to the responsible person. Such notice shall specify the requirement or restriction violated and the nature of the violation, and may also identify the actions necessary to remove or remedy the violations and preventive measures required for avoiding future violations and a schedule of compliance.
- 10.2. A copy of such notice shall be submitted to the Board of Appeals, Conservation Commission, Department of Public Works, Fire Department, and Board of Health. The cost of containment, clean-up, or other action of compliance shall be borne by the owner/operator of the premises.

## 11. SEVERABILITY

- 11.1. If any provision of this bylaw is held invalid by a court of competent jurisdiction, the remainder of the bylaw shall not be affected thereby. The invalidity of any section or sections or parts of any section or sections of this bylaw shall not affect the validity of the remainder of this bylaw.



Middleton, MA

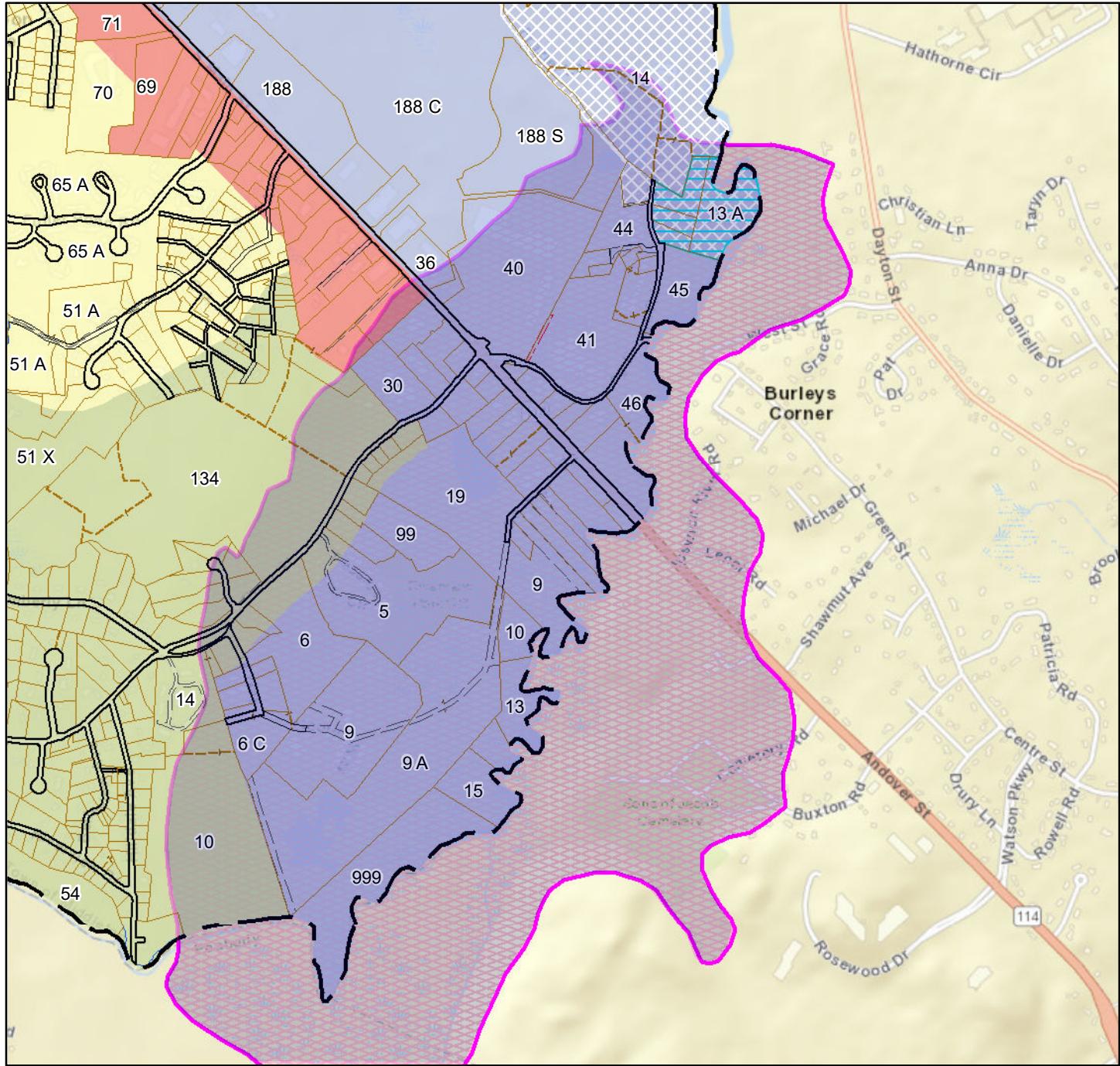
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Large Scale	—	Public Road	—	Property Hook	—	RESIDENCE (20,000')
—	—	CAI Town Line	—	Private Road ROW	—	RESIDENCE (40,000')
—	—	PWater	—	Right of Way	—	BUSINESS
—	—	Private Road	—	Utility	—	LIGHT INDUSTRY
—	—	Property Line	—	Tract Line	—	Medical Marijuana
					—	Adult Entertainment
					—	DEP Approved Zone IIs

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.