

TOWN OF MILTON
DEPARTMENT OF PUBLIC WORKS

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SEWER REGULATION

APRIL 2003

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DIVISION 1 GENERAL

Sec. 1-1. Intent and Purpose

The purpose of this Ordinance is the regulations controlling the use of public and private sewers and waste piping, the installation and connection of building sewers, and the discharge of waters and wastes into the public sewer systems; and providing penalties for violations thereof; in the Town of Milton, County of Norfolk, Commonwealth of Massachusetts.

Sec. 1-2. Administration

The Director is the Principal Town Official responsible for the administration of the Sewer, Sewer Permits, and the regulations related thereto. The Director may delegate any or all of the duties hereunder. The sewer functions and services, including maintenance of the public sewers and sewerage systems shall be performed by the DPW in accordance with these Rules and Regulations of the Town of Milton and Massachusetts Water Resource Authority including, but not limited to, the requirements of 360 CMR 10.000 and regulations and amendments thereof.

Sec. 1-3. Definitions

The following words and phrases, when used in this ordinance, shall have the meanings respectively ascribed to them:

Act shall mean Federal Water Pollution Control Act Amendments of 1972 (public Law 92-500), as amended.

Applicant or Owner shall mean any Person requesting approval to discharge Industrial Wastes or Sanitary Sewage into the Sewage Works of the Town.

Authority shall mean the Massachusetts Water Resources Authority, or its duly authorized representatives.

Authority Sewerage System shall mean the sewerage works under the control of the Authority including sewers, pump stations, treatment plants and all other works under the control of the Authority used in collection, storage, transport, treatment, and discharge of waters and wastes and in the operation of the residuals program.

Available - A Public Sewer shall be considered available when the property upon which a building is situated abuts a street, Easement, or right of way in which a Public Sewer is located. If said building is more than one hundred fifty (150) feet (45.7 meters) from the nearest Public Sewer, application may be made in writing to the Board to declare the Public Sewer "Not Available".

Biochemical Oxygen Demand (BOD) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20°C, expressed

in Milligrams per Liter, as determined by procedures described in Standard Methods

Board shall mean the Milton Board of Selectmen, or their duly authorized deputy, agent or representative(s).

Building Drain shall mean that part of the lowest horizontal piping of a drainage system that receives the discharge from soil or waste, inside the walls of the building and extends to ten (10) feet outside the inner face of the building wall.

Building Sewer shall mean the extension from the Building Drain to the Public sewer or other place of disposal, also called house or building connection. The property owner owns the Building Sewer up to and including its intersection with the public sewer pipe, and its maintenance, repair, and replacement are the sole responsibility of the property owner.

Chemical Oxygen Demand (COD) shall mean the quantity of oxygen utilized in the chemical oxidation of organic matter with a strong chemical oxidant, expressed in milligrams per Liter.

Combined Sewer shall mean a Public Sewer receiving both surface water and sewage.

Compatible Pollutant shall mean a substance that is amenable to removal in substantial amounts by a Sewage Treatment Plant. Compatible Pollutants include, but are not limited to, coliform bacteria, Suspended Solids, and those that exert BOD.

Cooling Water shall mean the water discharged from any system or condensation, air conditioning, cooling, refrigeration, or other system of heat transfer.

Contact Cooling Water shall mean water used in a process for cooling purposes that has come in direct contact with a raw material, intermediate product, waste product, or finished product.

Director shall mean the Director of the Public Works Department of the Town of Milton, or his authorized deputy, agent or representative(s).

DEP shall mean the Massachusetts Department of Environmental Protection.

Department shall mean the Department of Public Works (DPW).

Drain Layer A general term applied to one in the business of, and licensed by the Town for laying drains from existing Public Sewers to the building Drain of homes, commercial buildings, industrial buildings, and similar structures and properties.

Easement shall mean an acquired legal right for the specific use of land owned by others.

EPA shall mean the United States Environmental Protection Agency.

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Equalization of Waste Flows shall mean an averaging of variations in flow and composition of Sewage from particular sources by an equalizing basin or other means to provide a flow of reasonable uniform volume and composition prior to discharge into a Public Sewer.

Excessive shall mean amounts or concentrations of a constituent of Sewage which, in the judgment of the Director, and/or the Authority will cause damage to any Sewage Works, which will be harmful to or reduce the efficiency of a Sewage treatment process, which cannot be removed in the Sewage Treatment Plant to the degree required to meet the limits set forth in the plant's discharge permit, and/or which can otherwise endanger life, limb, or public property, and/or which can constitute a nuisance.

Floatable Oil shall mean oil, fat, or grease in a physical state such that it will separate by gravity from Sewage by treatment in an approved Pretreatment facility. Wastewater shall be considered free of floatable oil if it is properly pretreated and the wastewater does not interfere with the collection system.

Garage shall mean any building wherein is kept or stored one or more motor vehicles, including among others a public or private garage, carport, motor vehicle repair shop or paint shop, service station, lubritorium, car wash, or any building used for similar purposes.

Garbage shall mean solid wastes from the domestic and commercial preparation, cooking, and dispensing of food, and from the handling, storage, and sale of produce.

Grease, Oil and Sand Interceptors shall mean devices used to prevent grease, oil and sand from entering the waste stream.

Incompatible Pollutant shall mean a substance that is not amenable to removal in substantial amounts by a Sewage Treatment Plant. Incompatible pollutants include, but are not limited to, toxic metals and persistent organics.

Industrial User shall mean any user identified in the Standard Industrial Classification Manual of the U.S. Office of Management and Budget, as amended and supplemented under the following divisions"

- Division A -Agriculture, Forestry, and Fishing
- Division B -Mining
- Division C -Manufacturing
- Division E -Transportation, Communication, Electric, Gas and Sanitary Service
- Division I -Services

Industrial Wastes shall mean the solid, liquid, or gaseous wastes from industrial manufacturing, processing, trade or business as distinct from Sewage discharges from residences or from commercial establishments whose Sewage is similar in strength to that discharged from residences.

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Infiltration shall mean the water other than wastewater entering the Sewage Works, including building sewers, from the ground or water body, through such means as, but not limited to, defective pipes, pipe joints, connections or manhole walls. Infiltration does not include, and is distinguished from, inflow.

Inflow shall mean the water other than wastewater discharged into the Sewage Works, including building sewers, from such sources as, but not limited to, roof leaders, cellar, yard, and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, manhole covers, cross connections from Storm Sewers and Combined Sewers, catch basins, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

Infiltration and Inflow (I/I) shall mean the quantity of water from both infiltration and inflow.

May is permissive (see Shall).

Massachusetts Water Resources Sewerage District shall mean all the cities, towns and sewer districts served by the Authority in accordance with legislation.

Massachusetts Water Resources Sewerage System shall mean the Sewage Works under the control of the Authority.

Milligrams Per Liter shall mean a unit of the concentration of water or Sewage constituent. It is 0.001 grams of the constituent in one (1) liter of water.

Municipality shall mean any city, town or sewer district that discharges sewage or septage into the Massachusetts Water Resources Sewerage System whether the city, town or district is a member of the Massachusetts Water Resources Sewerage District or is served by contract with the Authority.

MWRA shall mean Massachusetts Water Resources Authority.

Natural Outlet shall mean any outlet, including storm sewers, into a Watercourse, pond, ditch, lake, or other body of surface or groundwater.

Person shall mean any individual, firm, company, association, society, corporation, partnership, group or any political subdivision of the Commonwealth.

pH shall mean the negative logarithm of the reciprocal of the concentration of hydrogen ions expressed in moles per liter. Neutral water, for example, has a pH value of 7 and a hydrogen ion concentration of 10^{-7} . The electronic method of measurement is preferred.

Pretreatment shall mean any treatment of Sewage to make it suitable for discharge to a Public Sewer according to the stipulations set forth herewith.

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Private Sewer shall mean the building drain and the building sewer and shall be owned, operated and maintained by the owner of the property on which the private sewer is located.

Properly Shredded Garbage shall mean the wastes from the preparation, cooking, and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in Public Sewers, with no particle greater than one-half (1/2) inch (1.27 centimeters) in any dimension.

Public Sewer shall mean a sewer in which all Owners of abutting properties have equal rights, and is controlled by a governmental agency or public entity. The public sewer does not include any portion of any building sewer.

Receiving Waters shall mean any Watercourse, river, pond, ditch, lake, aquifer, ocean, or other body of surface or groundwater receiving discharge of Sewage or effluent.

Sanitary Sewage shall mean liquid and water-carried human and domestic wastes from residences, commercial buildings, industrial plants and institutions, exclusive of ground, storm and surface water and exclusive of Industrial Wastes.

Sanitary Sewer shall mean a conduit that carries liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions together with storm surface, and groundwaters, which are not intentionally admitted.

Septage shall mean the liquid and solid wastes of Sanitary Sewage origin that are removed from a cesspool, septic tank or similar receptacle.

Sewage shall mean the spent water of the community and may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions, together with any groundwater, surface water, and storm water that may be present.

Sewage Treatment Plant shall mean any arrangement of devices and structures used for treating Sewage.

Sewage Works shall mean all facilities for collecting, pumping, treating and disposing of Sewage.

Sewer shall mean a pipe or conduit for carrying Sewage.

Shall is mandatory (see May).

Sludge shall mean solid and semi-solid residuals and concentrated contaminants removed by treatment of wastewater.

Slug shall mean any discharge of water or wastewater which, in concentration of any given constituent or in quantity of flow, exceeds five (5) times the average twenty-four (24) hour

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concentration of normal operating flow for more than fifteen (15) minutes and adversely affects the collection system and/or the performance of the wastewater treatment works.

Storm Drain or Storm Sewer shall mean a conduit for conveying stormwater, groundwater, subsurface water, or unpolluted water from any source.

Suspended Solids (SS) shall mean total suspended matter that either floats on the surface of, or are in suspension in, water, wastewater, or other liquids, and that is removable by laboratory filtering as prescribed in "Standard Methods for Examination of Water and Wastewater" and referred to as non-filterable residue.

Town shall mean the Town of Milton, Commonwealth of Massachusetts.

Toxic Wastes shall mean wastes containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any Sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of a Sewage Treatment Plant, and those wastes so specified in this Regulation.

Unpolluted Water shall mean water of quality equal to or better than the treated effluent criteria in effect or water that would not cause violation of receiving water quality standards and would not be benefited by discharge to the sewers and wastewater treatment facilities provided.

Users shall include all persons connected to the Town of Milton Sewer System whether resident within the Town, or not, and all users of MWRA (see "MWRA", 1.39).

Wastewater shall mean the used water of a community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions together with any groundwater, surface water, and stormwater that are not admitted intentionally.

Wastewater Facilities shall mean the structures, equipment, and processes required to collect, transport, and treat domestic and industrial wastes and dispose of the effluent.

Wastewater Treatment Works shall mean an arrangement of devices and structures for treating wastewater, industrial wastes, and sludge. Sometimes used as synonymous with "waste treatment facility" or "water pollution control facility" or "Sewerage System."

Watercourse shall mean a natural or artificial channel for the passage of water either continuously or intermittently.

DIVISION 2 SEWER SYSTEM**Sec. 2-1. When Bills for Sewer Charges are to be Sent Out, etc.**

The Director of Public Works shall cause to be made out and placed in the hands of the Town Collector, bills for such charges in each year, and at the same times shall cause to be sent to the persons from whom such sewer charges are due a notice stating the amount due and demand payment thereof. The Director of Public Works shall also cause to be kept in suitable books the names of all persons from whom such sewer charges are payable, the name and number of the street, the amount charged, and the amount of discount allowed, and said books shall be open to the Board of Selectmen.

Sec. 2-2. Sewer Charges / Payable

Such sewer charges shall be payable quarterly and shall bear interest at the rate of 14% per annum, from said date, provided they are not paid within 30 days after issuance. Such charges shall constitute a lien upon the real estate or recovered in an action of contract in the name of the town. It shall be the duty of the town collector to collect such sewer charges immediately when they become due, and all such sewer charges remaining unpaid thirty days after they are due, shall be collected forthwith by the town collector, by sale of real estate in the same manner as unpaid taxes upon real estate.

Sec. 2-3. Use of Public Sewers Required

- a) Unlawful Discharges - It shall be unlawful to discharge any polluted water without the applicable state and federal permits.
- b) Board Approval of Discharges - It shall be unlawful to discharge any wastes, Sewage, or Industrial Wastes to a Natural Outlet without the proper treatment and without prior approval by the Board.
- c) Connection to Public Sewers Required - The owners of all houses, buildings, or properties used for human occupancy, employment, recreations, or other purposes, situated within the Town and abutting on any street, alley, easement or right-of-way in which there is now located or may in the future be located a public sewer of the Town, are hereby required at their expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of these regulations within ninety (90) days after date of receipt of official notice from the Board of Health of the Town of Milton acting under the provisions Title 5 of the "State Environmental Code for the Commonwealth of Massachusetts, Minimum Requirements for the Subsurface Disposal of Sanitary Sewage" or regulations relative thereto, provided that the public sewer is within five hundred (500) feet of the property line. Said connections shall be made without exception, unless for reasons as determined by the Town of Milton Board of Health. Any person failing to connect, if required, within the time limit stated by the Board of Health shall be subject to a fine of not more than two hundred

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(\$200) dollars per day, as determined by the Board. Additionally, Persons with failed cesspools or septic systems may be required to connect to the proper public Sewer within a shorter time period, as determined reasonable by the Board.

Except as hereinafter provided, it shall be unlawful for property owners to construct or repair any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of wastewater where a public sewer is within five hundred (500) feet of the property line and where permission to enter such sewer can be obtained from the authority having jurisdiction over it.

DIVISION 3 BUILDING SEWERS AND CONNECTIONS**Sec. 3-1. Prohibitions.**

No unauthorized Person shall uncover (excavate), make any connections with or opening into, use, alter, or disturb any building sewer, public sewer or appurtenance thereof without first obtaining a written permit from the Director. The permit shall be obtained in accordance with the current regulations. Any Person proposing a new discharge into the public sewer or a substantial change in the volume or character of pollutants that are being discharged into the public sewer shall submit plans and calculations for the connection, stamped by a Massachusetts Registered Professional Engineer in compliance with 250 CMR 4.00, in accordance with these regulations. A permit must also be obtained for any repair work to existing building sewers. The Director and/or the Authority shall be notified at least forty-five (45) days prior to the proposed change or connection in order to obtain approval. No person shall break, cut or remove any pipe of the Public Sanitary Sewer, or make or cause to be made any connection to said Sewer except through the connection branches provided for that purpose, unless in another manner approved by the Director and/or the Authority.

Sec. 3-2. Permits.

There shall be two (2) classes of building sewer connection permits: (a) for residential and commercial service, and (b) for service to establishments producing Industrial Wastes. In either case, the owner(s) or his agent shall make an application in writing to the Director on a special form furnished by the Town. The permit application shall be supplemented by plans, specifications, or other information considered pertinent in the judgment of the Director. For minimum requirements see Appendix D. A permit application/connection and inspection fee, which shall include the routine costs associated with the inspection of the building sewer installation by the Director or his representative as determined by the Board, shall be paid to the Town at the time the application is filed. Permit application fees shall be established from time to time by the Director with Board of Selectmen approval. Applications for building sewer installation or repair permits, signed by the owner(s) of the premises to be benefited, or by his/their agent, must be made at the office of the Department of Public Works.

Permits are not transferable and are valid for no more than 180 days from date of issue. If no work commences within said sixty-day period, a new permit must be obtained.

The Board in conjunction with the Director of Public Works shall establish, amend and promulgate local limits and regulations consistent with MWRA regulations and guidelines for the Town's sewer connections to the Authority Sewerage System.

By regulation the Board in conjunction with the Director of Public Works shall establish limits and conditions on the issuance of sewer connection permits including but not limited to:

- Limits on rate, time and characteristics of discharge or requirements for flow regulation and equalization.
- Installation of inspection, flow measurement and sampling facilities,

including access to such facilities.

- Specifications for monitoring programs which may include flow measurement, sampling, chemical and biological testing, recording of data and a reporting schedule.
- Other conditions as deemed appropriate by the Town to ensure compliance with these regulations and with applicable requirements of federal or state law.
- All new sewer connection permits shall be subject to a permit and fees as described herein.
- The Director may require an evaluation of a proposed sewer connection, performed by a Massachusetts Registered Professional Engineer, to assess the impact the additional flow would have on the public sewer. The cost of said evaluation shall be borne by the applicant. A permit application may be denied if the additional flow is determined to have adverse effect on the public sewer.

No licensed Drain Layer shall have more than ten (10) permits outstanding at any time without written permission from the Board.

One copy of the permit shall at all times be available for inspection at the site of the work.

Drain layers shall only install building sewers during normal working hours of the Department of Public Works. The Board may approve emergency working hours in writing.

Sec. 3-3. Installation cost borne by Owner.

All Costs and expenses incidental to the installation, inspection by the Director and the Board, and connection of the building sewer to the Public Sewer shall be borne by the owner of the building. Said Owner shall indemnify the Town from any loss or damage that may directly or indirectly be occasioned by the installation and connection of the building sewer.

Sec. 3-4. Separate Building Sewers required.

A separate and independent building sewer shall be provided for every building; except where one building stands at the rear of another or on an interior lot and no private building sewer is available or can be constructed to the rear building through and adjoining alley, court, yard, or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer, with the written approval of the Director. A manhole shall be constructed at the junction of the front building sewer and the rear building sewer. Any connection made without such a permit shall be discontinued and any sewer use fees paid shall be forfeited. The Town does not and will not assume any obligation or responsibility for damage caused by or resulting from any such single connection.

Under no circumstance will one building sewer be allowed to connect and serve more than one house or dwelling unit under separate ownership except in the case of condominiums.

Sec. 3-5. Section 5. Existing Building Sewers

Existing or old building sewers may be used in connection with new buildings only when they are found, on examination and test by the Director, to meet all requirements of these Regulations. New building sewers shall include a watertight connection to the public sewer.

Sec. 3-6. Method of Construction

The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing to the requirements of the building and plumbing codes or other applicable rules and regulations of the Town. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the American Society of Testing Materials (ASTM), and the Water Pollution Control Federation (WPCF) Manual of Practice No. 7 "Operation and Maintenance of Wastewater Collection Systems," WPCF Manual of Practice No. FD-5, the American Society of Civil Engineers (ASCE) Manuals and Reports in Engineering Practice No. 60 "Gravity Sanitary Sewer Design and Construction", and WPCF Manual of Practice No. FD-4 "Design of Wastewater and Stormwater Pumping Stations" shall apply, except that only the following pipe may be used: vitrified clay, cast iron or polyvinyl chloride (PVC) pipe. All such connections shall be made gastight and watertight and verified by proper testing. The Director before installation must approve any deviation from the prescribed procedures and materials. Non-approved material will be required to be removed and replaced at the expense of the applicant.

Joints shall be tight and waterproof. No cement mortar joints will be permitted. The Board may require cast-iron pipe with leaded joints where the building sewer is exposed to damage by tree roots. If installed in filled or unstable ground, the building sewer shall be of cast-iron pipe, except that nonmetallic material may be accepted if laid on a suitable concrete bed or cradle as approved by the Director.

Any sewer line laid within ten (10) feet of a domestic water line shall be a ductile-iron pipe. A rubber compression joint-type pipe or approved equal may be used.

Sec. 3-7. Connection to the Building Drain

Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewers the wastewater carried by such building drain shall be lifted by means approved by the Board and discharged to the building sewer or public sewer. Shop drawings of proposed pumping equipment must be submitted for approval by the Director. Such lifting devices shall be installed and maintained by the Owner with no liability assumed by the Town.

All changes in grade or direction shall be made only by Boston Tee Wyes, cleanouts or cleanout manholes. No building sewer shall be laid parallel to and within five feet (5') of any bearing wall.

All construction for new buildings shall have the building drain exit the building through the basement floor and connect with the building sewer at an elevation below the basement floor

whenever possible.

Sec. 3-8. Prohibited Connections

No Person shall make connection of roof downspouts, foundation drains, sump pumps, areaway drains, or other sources of surface runoff or groundwater to a building sewer, which in turn is connected directly or indirectly to a Sanitary Sewer. Any persons found discharging said sources shall be subject to penalties as set forth in DIVISION 8 PENALTIES of these Regulations.

During Transfer of Ownership, the Town shall inspect each building sewer for connections made in violation of these regulations before transfer ownership and notify the buyer of any violation.

Any person(s) found discharging non-contact cooling waters to the public sewer shall be subject to penalties as set forth in DIVISION 8 PENALTIES of these Regulations.

The Director or his representatives reserves the right to inspect any property to confirm that there are none of the aforementioned unauthorized connections to the public sewer.

Sec. 3-9. Method of Pipe Laying and Backfilling

All pipe shall be laid in a six (6") inch screened $\frac{3}{4}$ " gravel envelope. In instances where groundwater may back up into the basement, a water tight seal shall be placed around the cast-iron portion of the building sewer, at the building.

Backfill shall be placed in twenty-four (24") inch layers (minimum) and each layer shall be well compacted. Minimum cover for building sewers shall be sixty inches (60").

No blocks or stones shall be used to support the pipe.

When water is present in a trench, a sump of crushed stone shall be constructed, and water shall be pumped at all times. The trench shall be kept dry at all times during construction.

At all times when pipe installation is not in progress, the open ends of the pipe shall be closed with temporary watertight plugs or by other approved means.

All joints and connections shall be made watertight and gastight.

"No bell" cast-iron pipe is prohibited.

All joints between existing vitrified-clay pipe and other pipe and metal shall be made with approved pre-molded gasket joints.

The connection of the building sewer into the Public Sewer shall be made at the "Y" branch, if such branch is available at a suitable location. If no branch is available, a connection may be made by tapping the existing Sewer by an approved method. Cutting the hole in the pipe by hand is

prohibited.

The connection of the building sewer into the Sanitary Sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the Town, or the procedures set forth in appropriate specifications of the ASTM and WPCF Manual of Practice No.9. All such connections shall be made gastight and watertight. The Director before installation must approve any deviation from the prescribed procedures and materials.

Sec. 3-10. Notification of the Director

The applicant for the building sewer permit shall notify the Director when the sewer is ready for inspection and connection to the public sewer. The connection and testing shall be made under the supervision of the Director or authorized representative, and no backfilling shall be permitted until all appropriate inspections are made. If the appropriate inspections are not completed, the Director may require an internal television inspection of the service connection. Any defects in the service shall be repaired prior to receiving a permit.

Sec. 3-11. Protection of Public and Property

All excavations for building sewer installations shall be adequately guarded with barricades and lights so as to protect the public from hazard. Any person, who during the installation of a sewer connection, shall excavate or otherwise distribute the roadway and/or sidewalk shall obtain a street opening permit from the Department at least seventy-two (72) hours prior to the commencement of the work. A copy of each such street opening permit shall be filed with the Director at least seventy-two (72) hours before the work is commenced. A performance bond of \$5,000 or the cost of repairing said roadway and/or sidewalk to its prior condition, which ever is greater, shall be required before permit is granted. The Director shall determine the bond amount. The Drain Layer in a manner satisfactory to the Town shall restore streets, sidewalks, parkways, and other public property disturbed in the course of the work. When it is necessary to close off a street, the Fire Department and Police Department shall be notified by the Drain Layer seventy-two (72) hours in advance.

The DPW reserves the right to shut off the public sewer for the purpose of making alterations or repairs.

Mainline public sewer extensions shall be authorized by Board of Selectmen Vote or by Subdivision approval of the Planning Board and shall be installed in accordance with current Department of Public Works construction standards.

Sec. 3-12. Variations from Rules and Regulations

Any variation from these Rules and Regulations of the Town shall receive the approval of the Board before implementation.

Sec. 3-13. Notification for Commencement of Work

The Director or duly authorized agent shall be notified at least seventy-two (72) hours prior to the

beginning of any work on a Sewer or Building Drain.

Sec. 3-14. Proper Venting Required

No building shall be connected to the Public Sewer system unless said building has a soil line extended to a point above the roof, properly vented.

Sec. 3-15. Reporting of Prohibited Substances Found in Building Sewer

All Drain Layers are required to give a full written report to the Director within twenty-four (24) hours in the event that prohibited substances, as defined in Article IV, are found in a building sewer during the course of the work.

Sec. 3-16. Notification for Completion of Work

Notification of the completion of the work with certification that all conditions have been complied with shall be filed in writing with the Director within twenty-four (24) hours after the completion of the work covered in each permit.

Sec. 3-17. License for Drain Layers

All Drain Layers shall obtain a license from the Director prior to performing any work in the Town. All licenses shall be issued for a one-year period. In applying for a license, the Drain Layer shall provide all information required by the Board including a statement that the licensee will supervise and be responsible for all work performed under the license. The Licensee shall file with the Town a Certificate of Insurance in the sums of \$1,000,000 per occurrence and \$2,000,000 aggregate and product completed operations to cover Public Liability; \$1,000,000 per occurrence and \$2,000,000 aggregate to cover product/completed operations, a Certificate of Insurance in the sum of \$250,000 covering Property Damage including XCU coverage for explosion, collapse, or underground damage; and bonds satisfactory to the Milton Director of Public Works. In addition, a Certification of Insurance covering Workers' Compensation with coverage in the statutory limits and Employer's Liability Insurance in the amount of \$500,000/\$500,000/\$500,000 shall be filed, all of which shall remain in full force and effect for a period of at least one year from the date of approval. No insurance policy shall be cancelled without thirty (30) days prior written notice by registered mail to the Board. Said insurance shall indemnify the town against any and all claims, liabilities, or actions for damages incurred in, or in any way connected with, the performance of the work by a Drain Layer and for, or by reason of, any acts or omission of said Drain Layer in the performance of his work. Each policy of insurance other than Workers' Compensation shall name the Town of Milton as an additional insured.

Sec. 3-18. Licensee Not to Allow Use of Name by Another

No person duly licensed to construct Building and other private Sewers and make connections with Public Sewers shall allow his name to be used by any other person, either for the purpose of obtaining permits or doing any work under his license.

Drain Layers licensed by the Director shall perform all building sewer installation work. Applicants for permits must be Drain Layers licensed in Milton.

Sec. 3-19. Forfeiture of License

Any Drain Layer in violating of any provision of these Regulations shall, in addition to the general penalties provided for the violation of these Regulations in Article IX, forfeit his license. Reinstatement of licenses shall be at the discretion of the Director.

Sec. 3-20. Inspection Powers of the Director and Authority

The Director, the Authority, and their duly authorized agents bearing proper credentials and identification shall be permitted to enter, at reasonable times, all properties connected with the Public Sewers for the purposes of inspection, observation, measurement, sampling, and testing, all in accordance with the provisions of these Regulations. They may inquire into any processes with the provisions of these Regulations. They may inquire into any processes including metallurgical, chemical, oil, refining, ceramic, paper, plating, or other industrial activity that contribute waters or wastes to the Public Sewers, but shall not order or demand information concerning any patented process or trade secret beyond that necessary to determine the kind, source, and amount of Sewage discharge from the industrial or commercial plant to the Public Sewers.

Sec. 3-21. Infiltration/Inflow Reduction

- a) Where, in the opinion of the Director, development plans for a housing development, an industrial complex, a commercial project, or for any other construction, including but not limited to structures designed for charitable, medical, religious or education use, indicate the prospect for negative impact on any portion of the Town of Milton sewer system, the Director shall require the owner, builder, or developer to (a) reduce infiltration or inflow in an amount four times greater than the calculated flow determined for the proposed project; or (b) pay an I/I mitigation fee in accordance with APPENDIX C of these regulations Said work to be completed prior to completion of the building or occupancy.
- b) An application for a connection to the Town of Milton sewer system which serves a single residential building that is not part of a development, subdivision or is less than four units, shall be subject to the I/I mitigation fee in accordance with APPENDIX C of these regulations.
- c) Money collected by the Town of Milton for this fee shall be deposited in an interest bearing account, to be used by the Board of Selectmen to provide infiltration/inflow reduction in sections of the Town of Milton sewer system deemed the most appropriate and cost effective by the Board of Selectmen.
- d) All plans submitted in which the calculated flow, using Title V minimums, exceeds the amount of 2,000 gallons per day, shall be subjected to impact study to determine the effects of the proposed calculated flow on the system.

If the Director determines that there will be a negative impact due to the proposed flow and that

infiltration/inflow reduction is required, the owner, builder or developer shall, at its expense, perform all testing, analysis and work required by the Milton Town Engineer, under the supervision of a qualified environmental consulting firm approved by the Milton Town Engineer.

The Milton Town Engineer shall approve all such testing, analysis and work.

Sec. 3-22. Sewer Line Construction and Maintenance

The cost of the construction hereafter of any sewer or extension of any existing mainline sewer or the doing of any other work in connection therewith, except building sewers, shall be assessed upon the estates especially benefited thereby, and such cost shall be the average cost, to be determined by the Director in each year, of such construction and other work in connection therewith in a period of three years preceding the year in which such average cost is to be determined.

The full cost of construction of the building sewer connection from the public sewer to the dwelling unit or estate benefited, shall be paid for directly by the persons or owners of the estates benefited.

The maintenance and cleaning of building sewer shall be the responsibility of the owner of the dwelling unit or estate benefited by such building dweller.

Assessments. The Director shall determine the method of assessment of the cost of construction of public sewers to sewer users.

If the Town is required to perform emergency maintenance or repair work on private property, said work will be paid for by the property owner on a time and materials basis and be subject to the Town's direct labor burden and equipment overhead costs.

DIVISION 4 USE OF PUBLIC SEWERS**Sec. 4-1. Disposal of Unpolluted Water Prohibited**

No Person shall discharge or cause to be discharged any unpolluted waters such as stormwater, surface water, groundwater, roof or surface runoff, tidewater, subsurface drainage, uncontaminated cooling water, unpolluted process waters, non-contact cooling water, or non-contact industrial process water to any public sanitary sewer. In general, only sanitary sewage shall be discharged to the common sewer.

Sec. 4-2. Discharge Method Specified

Storm water and all other unpolluted drainage shall be discharged to such Public Sewers as are specifically designated as Storm Sewers, or to a Natural Outlet approved by the Board. Industrial cooling water or unpolluted process waters may be discharged, on approval of the Board, to a Storm Sewer or Natural Outlet.

Sec. 4-3. Prohibited Wastes

No Person shall discharge, or cause to be discharged, substances, materials, waters, or wastes if it appears likely, in the opinion of the Director that such wastes are likely, either by themselves or by interaction with other substances: (1) To harm either the sewerage system or the wastewater treatment process or equipment, (2) to be otherwise incompatible with the treatment process, (3) to cause a violation of Federal and State discharge permits issued to the Authority (4) to adversely affect receiving waters, (5) to endanger life, limb, or property or (6) to constitute a nuisance. Nor shall any person discharge the following described substances, waters, or wastes:

- a) Any gasoline, benzene, naphtha, fuel oil, crude oil, lubricating oils, flammable or explosive liquids, solids, or gases, or any other oils or greases of hydrocarbon or petroleum origin.
- b) Any water or wastes having a pH lower than 5.5 or higher than 9.5 or having any other corrosive or injurious properties capable of causing damage or hazard to structures, equipment, sewerage systems, and personnel.
- c) Solid or viscous substances in quantities or of such size capable of causing obstruction of the flow in Public Sewers, or other interference with the proper operation of the Sewage Works such as, but not limited to, ash, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, rubber, latex, underground garbage, whole blood, paunch manure, hair and fleshings, entrails, paper dishes, cups and milk containers, abrasive materials, etc. either whole or properly shredded by garbage grinders.
- d) Any liquid or vapor having a temperature higher than one hundred fifty (150°F), (65°C).
- e) Any water or waste containing fats, wax, grease, or oils of vegetable or animal origin in excess of one hundred (100) mg/l or containing other substances (not specifically prohibited in Section 4-3 which may solidify or become viscous at

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temperatures between thirty-two (32) degrees F or zero (0) degrees C and one hundred and fifty (150) degrees F or sixty-five (65) degrees C. Waters or wastes containing such substances, excluding normal household waste, shall exclude all visible floating oils, fats and greases. The use of chemical or physical means (such as temperature variation, emulsifying agents mechanical mixers) to bypass or release fats, oils, and greases into the municipal sewerage system is prohibited. If the discharge concentration for any fats, oils or greases is in excess of one hundred (100) mg/l after treatment, the Director and/or the Authority may increase the discharge concentration limit on a case-by-case basis when the user demonstrates to the Director's and/or Authority's satisfaction that his discharge is not contributing to nuisance conditions.

- f) Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths (3/4) horsepower (0.76 hp metric) or greater shall be subject to the prior review and approval of the Director.
- g) Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not.
- h) Any waters or wastes containing amounts of toxic or objectionable metals or wastes exerting an excessive chlorine demand in excess of the concentrations attainable by acceptable control technology, including, but not limited to: antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, tin, zinc. In general, wastes containing the aforementioned metals shall be treated to reduce their concentrations to the minimum levels attainable by chemical precipitation processes or other equally effective methods. In no case, however, shall allowable metal concentrations be higher than those concentrations allowed by applicable Federal or State law.
- i) Any waters or wastes containing amounts of toxic or objectionable nonmetals or other taste or odor producing substances in excess of concentrations attainable by acceptable control technology, including, but not limited to: ammonia, cyanides, herbicides, pesticides, phenols, sulfates, chlorides, polychlorinated biphenyls (PCB's), sulfides. In no case, however, shall allowable nonmetal concentrations be higher than those concentrations allowed by applicable Federal or State law.
- j) Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Director or the Authority in compliance with applicable State or Federal regulations.
- k) Materials which exert or cause:
 - Unusual concentrations of inert Suspended Solids (such as, but not limited to, Fullers earth, lime slurries, and lime residues) or of dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate).
 - Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions).
 - Unusual BOD, Chemical Oxygen Demand, or chlorine requirements in such quantities as to constitute a significant load on the Sewage Treatment Plant.

- Unusual volume of flow or concentration of wastes constituting slugs, as defined in Article I.
- l) Water or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment process employed, or are amenable to treatment only to such degree that the Sewage Treatment Plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters. The attainment of specific levels for discharge to municipal sewers by dilution in the absence of treatment shall be prohibited.

Unless otherwise stated herein the provisions of 360 CMR 10 and any supplementary revisions shall govern all discharges to the sanitary sewer system.

Sec. 4-4. Decisions of Director or the Authority

If any waters or wastes are discharged or are proposed to be discharged to the public sewers, which contain the substances or possess the characteristics enumerated in Sec. 4-4 of this Article, and which, in the judgment of the Director or the Authority, may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the Director or the Authority may:

- a) Reject the wastes.
- b) Require Pretreatment to an acceptable condition for discharge to the Public Sewers.
- c) Require control over the quantities and rates of discharge.

Sec. 4-5. Special Temporary Permits

Notwithstanding the limitations set forth in Division 4, Sec. 4-3 and 4-4 above, a special temporary permit or amendment to an existing permit between the Authority and the Town and the user may be issued whereby a waste of unusual character or strength may be accepted on an interim basis when in the opinion of the Authority, unusual or extraordinary circumstances compel special terms and/or conditions of temporary durations. Such permits or amendments will be issued only when, in the opinion of the Authority, they would not cause any interference with or disruption in the treatment works, would not violate the NPDES permit or Commonwealth water quality standards, and would not force additional controls on other discharges to achieve compliance with effluent limitations.

Sec. 4-6. Grease, Oil and Sand Interceptors

An approved grease interceptor shall be installed in the waste line leading from sinks, drains or other fixtures in the following establishments: Restaurant, cafeteria, hotel, hospital, institutional, factory, club, and other commercial kitchens; food and meat packing and processing establishments; supermarkets, bakeries, and other establishments where grease can be introduced into the sewer system in quantities that can cause line stoppage or hinder sewage disposal, or when, in the opinion of the Director, they are necessary for the proper handling of liquid wastes containing grease or floatable oil in excessive amounts or any flammable wastes, sand, or other harmful ingredients, except that such interceptors shall not be required for private living quarters or dwelling units. Grease, oil, and sand interceptors shall be provided and maintained by the Owner (not the Board).

All interceptors shall be of a type and capacity approved by the Authority and the Director, and shall be located outside the building as to be readily and easily accessible for cleaning and inspection. Each gasoline station must have an approved gasoline trap. Each car wash must have an approved sand trap.

- a) Grease interceptors shall be installed in accordance with the Massachusetts State Plumbing Regulations unless otherwise stated herein.
- b) Grease interceptors shall not be installed unless tested, rated and bear the seal of acceptance of State Plumbing Board or approved by the Director.
- c) Installed grease interceptors shall have a minimum capacity of 1,500 gallons and have a grease retention capacity of not less than two (2) pounds for each gallon per minute of flow. Flow rate from the State Environmental Code, Title V, 310 CMR 15, shall be used to determine the size of a grease trap. Other alternative and innovative approved methods of grease removal and disposal may be used if approved by the Health Department, Plumbing Inspector, and Department of Public Works. All newly constructed facilities must install industrial type grease traps.
- d) A manhole shall be installed on the discharge line of the grease trap for sampling of the grease trap effluent. Sampling shall be performed to ensure compliance with the regulations.
- e) Grease interceptors shall be equipped with devices to control the rate of water flow through the interceptors so that the flow rate does not exceed the rated design flow of the interceptors.
- f) The waste from food and waste grinders shall not discharge to the sewer system through a grease interceptor.
- g) The use of water-cooled grease interceptors is prohibited.
- h) In the maintaining of these interceptors, the owner(s) shall be responsible for the proper removal and disposal by appropriate means of the captures material and shall maintain records of the dates, and means of disposal. These records shall be submitted to the Director annually. Licensed waste disposal firms must perform any removal and handling of the collected materials.
- i) Oil water separators must be cleaned prior to annual renewal of a Class 1 permit. Documentation must be provided to the Board of Selectmen prior to renewal.

Sec. 4-7. Maintenance of Pretreatment Facilities

Where preliminary treatment or flow-equalizing facilities are provided for any waters or wastes, the Owner at his expense shall maintain them continuously in satisfactory and effective operation.

Sec. 4-8. Control Manholes

When required by the Authority or the Director, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole, together with such necessary meters and other appurtenances, in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the Authority and the Director. The manhole shall be installed by the owner at his expense, and shall be maintained by him so as to be

safe and accessible at all times.

Sec. 4-9. Wastewater Sampling

All measurements, tests, and analyses of the characteristics of waters and waste waters to which reference is made in this By-law shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association, and shall be determined at the control manhole provided, or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the controlled manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb, and property. The particular analyses involved will determine whether a twenty-four (24) hour composite of all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from 24-hour composites of all outfalls whereas pH's are determined from periodic grab samples.

Sec. 4-10. Monitoring of Wastes

All industries discharging into a public sewer shall perform such monitoring of their discharges as the Authority, Director, and/ or other duly authorized employees of the Town may reasonably require, including installation, use and maintenance monitoring equipment, keeping records and reporting the results of such monitoring to the Director and/or Authority. The Director and/or the Authority shall make such records available upon request to other agencies having jurisdiction over discharges to the receiving waters.

Sec. 4-11. Notice of Accidental Discharge Required

Any Person responsible for, or becoming aware of, the discharge to a public sewer, accidental or otherwise, of any prohibited substance or of any slug as defined herein, shall report same immediately by telephone to the Director and the Massachusetts Water Resources Authority so that necessary precautions can be taken to minimize the deleterious effects of the discharge. This notification shall be followed, within 15 days of the date of occurrence, by a detailed written statement to the Authority and the Director describing the causes for the accidental discharge and the measures being taken to prevent future occurrence. Such notification will not relieve users of liability for any expense, loss or damage to the Massachusetts Water Resources Sewerage System and the Town's Sewage Works, or for any fines imposed on the Authority or the Town.

Users shall inform their employees of the existence of these regulations and at least one copy shall be permanently posted on the user's bulletin board. Each user shall permanently post a notice advising employees who in their organization has been designated as the responsible individual for compliance with these regulations and who should be notified of any accidental discharges in violation of these regulations.

DIVISION 5 INDUSTRIAL WASTES

Sec. 5-1. Industrial User Permits

Every user discharging Industrial Wastes to the Town's Public Sewers or directly into the Authority's Sewerage System shall obtain a joint permit from the Authority and the Town. Industrial Users proposing new discharges shall obtain such permits prior to constructing a building sewer. The Authority and the Board may change the conditions of a permit from time to time as circumstances, including regulations enacted or promulgated by the Federal or State government or its agencies, may require. The Authority and the Board may stipulate special conditions and terms upon which the permit will be issued. No user may increase the daily volume, strength or rate of his permitted discharge beyond fifteen percent (15%) without first securing an amendment to his permit. A permit shall not be reassigned or transferred.

Sec. 5-2. Requirements for Obtaining Industrial User Permits

Every Industrial User shall be required to obtain a permit and shall, within 90 calendar days of the passage of this Regulations, complete and file at its own expense a permit application form with the Authority and the town. Known Industrial Users who have not filed a permit application will be notified promptly by the Authority or the Director to apply for a permit. As additional users become identified through industrial waste surveys, they will be notified to apply for a permit. All Industrial users are advised to apply for a permit prior to such notification. Permit application forms may be obtained from the Director and shall be filed within 30 calendar days of notification.

The Authority and the Director shall evaluate the adequacy of data furnished in the application form. If insufficient data has been furnished; the Authority will notify the Industrial User to provide additional data within a specified time. After acceptance of data, the Authority and the Board will issue the permit. The Authority and the Board may stipulate special conditions and terms upon which the permit may be issued.

If an industrial user discharges amount or rates of pollutants in violation of these regulations, the Authority or the Board may revoke the existing permit. If an Industrial User shows that changes in the industrial process have improved the characteristics and/or volume of its discharge, the permit may be modified upon application by the Industrial User to the Authority and the Board.

Sec. 5-3. Conditions of Permit

Permits may contain the following conditions:

- a) Limits on rate, time and characteristics of discharge or requirements for flow regulation and equalization.
- b) Installation of inspection, flow measurement and sampling facilities including access to such facilities.
- c) Specifications for monitoring programs that may include flow measurement, sampling, chemical and biological tests, recording of data, and reporting schedule.

- d) Pretreatment requirements and schedules for implementation, including schedules for reporting progress towards meeting these requirements.
- e) Submission of discharge reports.
- f) Schedules for the payment of industrial cost recoveries as required under Section 204 of the Act.
- g) Special service charges or fees.
- h) Other conditions as deemed appropriate by the Authority or the Board to ensure compliance with these regulations and with applicable requirements of Federal or State law.

Sec. 5-4. Reporting

When required by the permit, each industrial permittee shall submit a duly signed report to the Authority and the Board containing all information requested by the Authority or the Board. Such reports will be submitted at the specified intervals in a form acceptable to the Authority and the Board.

Sec. 5-5. Industrial Wastes Measurements

Measurement and analyses of Industrial Wastes are to include but not be limited to the following list where applicable. If any item is not applicable, it shall be so stated on the report of the measurements and the reason for deletion stated.

- a) Physical Parameters
 - Flow
 - pH
 - Temperature
 - Color
 - Specific Conductance
- b) Chemical and Biological Parameters
 - Total Solids
 - Total Volatile Solids
 - Total Suspended Solids
 - Total dissolved solids
 - Acidity
 - Alkalinity
 - 5-day BOD
 - COD
 - Oil and grease
 - Chloride
 - Sulfate
 - Sulfide
 - Phenols
 - NH₃ (as N)
 - NO₃ (as N)
 - NO₂ (as N)

- Kjeldahl Organic Nitrogen (as N)
- Ortho-Phosphorus (as P)
- Total Phosphorus (as P)
- Cr, Cu, Fe, Cd, Pb, Mn, Zn, F, As, Hg, Ni, Ag

Sec. 5-6. Flow Measurement

For all industries with an average sewage flow of less than 3,000 gallons per day, flow shall be measured with a sealed water meter on the water supply line. For all industries with an average sewage flow of 3,000 gallons per day or more, a sewage flow measuring device of a type approved by the Board shall be installed and maintained by the owner at his expense for the purpose of sewage flow measurement.

Sec. 5-7. Use of Information

The Authority and the Town may use the information provided in the permit applications, permits and reports as the basis for determining user charges and payments.

DIVISION 6 PROTECTION FROM DAMAGE

Sec. 6-1. Prohibited Acts

No unauthorized person shall maliciously, willfully, or negligently break , damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is a part of the sewerage system or wastewater facilities or public storm drain. Any person(s) violating this provision shall be subject to all civil or criminal penalties as provided by Massachusetts General Laws or these regulations.

Sec. 6-2. Trespass

No unauthorized person shall enter or remain in or upon any land or structure of the sewage works. Any person violating this provision shall be subject to charges of trespass.

DIVISION 7 POWERS AND AUTHORITY OF INSPECTORS**Sec. 7-1. Permission for Inspection**

The Director, Board, and other duly authorized employees of the Town or the Authority bearing proper credentials and identification shall be permitted to enter, at reasonable times, all properties connected with the public sewers for the purposes of inspection, observation, measurement, repair, maintenance, sampling, and testing pertinent to discharge to the wastewater facilities in accordance with the provisions of these regulations. The Director, the Board, the Authority or their representatives, shall have no authority to inquire into any metallurgical, chemical, oil, refueling, ceramic, paper, or other industrial activity beyond that having direct bearing on the kind and source of discharge to the Public Sewers, Watercourses, Natural Outlets, or facilities for sewage treatment.

The Director or other duly authorized employees or agents are authorized to obtain information concerning industrial processes that have a direct bearing on the kind and source of discharge to the wastewater facilities. The industry may withhold information considered confidential. However, the industry must establish that disclosure of the information in question to the public might result in an advantage to competitors.

Sec. 7-2. Requirement to Observe Safety Rules

While performing the necessary work on private properties referred to in Article VII, Section 1, above, the Director, Board, Authority, or their duly authorized representatives shall observe all applicable safety rules established by the company which owns or occupies the property.

Sec. 7-3. Authority in Easements Acquired by the Town

The members of the Board, the Director and other authorized agents of the Town or the Authority bearing proper credentials and identification shall be permitted to enter upon all private properties through which the Town or the Authority holds a duly acquired easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair, maintenance, and testing of any portion of the sewage works lying within said easement. All entries and subsequent work, if any, on said easement, shall be done in full accordance with the terms of the duly acquired easement pertaining to the property involved.

DIVISION 8 PENALTIES

Sec. 8-1. Written Notice of Violation.

Whenever on the basis of information available to it, the Town finds any person found to be violating any provision of this Regulation, except Article VI, the Town may take any or all of the following actions:

- a) Issue an order to cease and desist any such violation;
- b) Issue an implementation schedule ordering specific actions to be taken together with time and schedule requirements;
- c) Bring a civil or criminal action as provided by law;
- d) Take any action available to it under federal, state, or local laws or regulations.

Sec. 8-2. Penalty for Continued Violation

Any person who shall continue any violation beyond the time and schedule requirements provided for in Article IX, Section 1, shall be charged with a misdemeanor and on conviction thereof shall be fined in the amount not exceeding three hundred (\$300.00) dollars for each violation. Each day in which any such violation shall continue shall be deemed a separate offense. If the violation continues, the board shall direct the Town Counsel to seek an injunction in the Superior Court of the Commonwealth of Massachusetts requiring the offender to cease all violations. Violations may result in the revocation of Town licenses. This provision may be enforced through non-criminal disposition.

In addition, and not in lieu of a fine, any person violating any of the provisions of this ordinance shall be subject to a civil penalty up to \$5,000.00 for each violation, as provided by G.L. c.83, 10. Each day a violation shall continue shall be deemed a separate offense.

A system of sewer use charges together with suitable procedures for monitoring and enforcing compliance with sewer use regulations shall be set after a public hearing.

Users resident in the Town of Milton and non-resident users metered to the Department shall be assessed user charges with water usage as measured by the Department.

Users not metered by the Town of Milton shall be assessed user fees as measured by water usage provided by the public water system which provides their service, if applicable, or if not connected to any public water system, then such measurement shall be made by estimation of the average of five comparable users.

All Town Departments and all county, state and municipal buildings shall be responsible for payment of user fees assessed in accordance with water usage.

Users of Town property including tenants and lessees shall be responsible for payment of user fees assessed in accordance with water usage.

Sec. 8-3. Surcharge

Any person found to be discharging unpolluted waters, as described in Article IV, Section 2, shall be subject to a non-refundable surcharge in an amount to be determined by the Director. The amount shall be based on the current sewer rates and the estimated flow of the unpolluted water discharged.

Sec. 8-4. Liability

Any Person violating any of the provisions of this ordinance shall become liable to the Town and/or the Authority for any expense, loss, or damage occasioned by Town or the Authority by reason of such offense.

DIVISION 9 VALIDITY

Sec. 9-1. Repeal of Conflicting Regulations

All regulations or parts of regulations in conflict herewith are hereby repealed.

Sec. 9-2. Invalidation of Sections

If any section, clause, sentence or provision of these regulations shall be determined to be invalid or unenforceable by final judgment of a court of competent jurisdiction, the remaining provisions shall continue in effect to the extent permitted by law.

Sec. 9-3. Changes in Rules and Regulations

The Board may, from time to time, add to, delete from, change or clarify any of the Rules and Regulations. Any request for amendment of these Rules and Regulations must be submitted in writing, with the reasons therefore, to the Board for its approval. Said amendment shall be in force only after its passage, approval, recording and publication as provided by the Law.

Sec. 9-4. Massachusetts Water Resources Authority Regulations

In addition to the Rules and Regulations set forth in this regulation, all Persons shall comply in full, with the rules and regulations covering discharge of sewerage works within the Massachusetts Water Resources Sewerage District.

Sec. 9-5. Appeals

The Board of Selectmen shall receive appeals regarding of differences between the Director and sewer users on matters concerning interpretation and execution of the provisions of these regulations. Appeals must be made within ten (10) calendar days of any decision made by the Director.


DIVISION 10 ADOPTION

These Regulations were adopted by the Milton Board of Selectmen on May 1, 2003. They supercede Regulations adopted by the Board of Selectmen on May 23, 1991 and amended on August 5, 1999.

May 1, 2003
Date

Maria The Elder
James Smully
Chas. McCa
Board of Selectmen

**APPENDIX A
RESIDENTIAL OR COMMERCIAL BUILDING SEWER
APPLICATION**



Permit No. _____

**RESIDENTIAL OR COMMERCIAL BUILDING
SEWER APPLICATION**

To the Town of Milton, Massachusetts: The undersigned, being the

_____ of the property located at
(owner, or owner's agent)_____ does hereby request a
(street address)permit to install and connect a building sewer to serve the _____
(residence, commercial, building, etc.)
at said location.

- a) The following indicated fixtures will be connected to the proposed building sewer:

<u>Number</u>	<u>Fixture</u>	<u>Number</u>	<u>Fixture</u>
_____	Kitchen Sinks	_____	Water Closets
_____	Lavatories	_____	Bath tubs
_____	Laundry Tubs	_____	Showers
_____	Urinals	_____	Garbage grinders

Specify other fixtures _____

- b) The number of persons who will use the above fixtures is _____
- c) The name and address of the person or firm who will perform the proposed work is:

- d) Plans and specifications for the proposed building sewer are attached hereto as Exhibit " A ".

In consideration of the granting of this permit, the undersigned agrees:

1. To accept and abide by all provisions of the "Sewer Use Regulations" of the Town of Milton and of all other pertinent regulations that may be adopted in the future.
2. To pay all the cost of said particular sewer and its connection with the common sewer in said street, including all labor and materials or any other expense incurred necessary for the proper construction of said particular sewer as determined by the Selectmen.
3. To maintain the building sewer at no expense to the Town.
4. For himself, his heirs, devisees and assigns, that the said Sewer Commissioners shall have access at all reasonable hours, to the said premises, to see that all the laws, rules and regulations relating to the sewer are complied with.
5. To notify the Director when the building sewer is ready for inspection and connection to the public sewer, but before any portion of the work is covered.
6. That construction of the sewer connection will be completed within sixty (60) days of issuance of this permit.
7. Additional Conditions may be attached.

Signed _____ Date _____
(Applicant)

(Address of Applicant)

Application approved and permit granted in accordance with the attached conditions.

Signed _____ Date _____
(Director of Public Works)

Sewer Installed

Plumbing Permit Issued

**Plumbing Accepted
System Operation**

(name)

(name)

(name)

APPENDIX B
INDUSTRIAL USER SEWER CONNECTION APPLICATION

TOWN OF MILTON
General Permit Application

PW - 0100

Date: _____

APPLICANT INFORMATION

PROJECT LOCATION: _____

Contact Person: NAME _____ PHONE _____

MAILING ADDRESS: _____

Property OWNER: NAME _____ PHONE _____

CONTRACTOR: NAME _____ PHONE _____

*ENGINEER / NAME _____ PHONE _____

ARCHITECT: _____

* If developer is different from owner or contractor, both shall be listed. Name of engineer responsible for design shall also be listed.

AUTHORIZATION: In accepting this permit I/We agree to hold the Town of Milton harmless from loss, cost or damage of every name or nature arising wherefrom. I/We have read and agree to the applicable Town of Milton regulations pertaining to this application.
If owner is a corporation, there shall be attached a certificate authorizing the signatory to act on behalf of the said corporation. Said authorization shall carry the corporate seal and signature of the clerk of the corporation.

PROPERTY OWNERS SIGNATURE _____ DATE _____

CONTRACTOR'S SIGNATURE _____ DATE _____

THIRTY DAY PERMIT (check All that apply)

1. ☐ Excavation in Right of Way
2. ☐ Driveway Entrance
3. ☐ Occupy Right of Way

DIG SAFE # _____

Driveway Entrance Approval

Planning _____
Engineering _____
Building _____

UTILITY CONNECTION PERMIT (check All that apply)

- **1. ☐ Sewer: Size and pipe material (attach sewer application)

GPD Discharge: _____

- **2. ☐ Water: Size and pipe material

Domestic Service: _____

Lawn Service: _____

Fire Service: _____

GPD Discharge: _____

- **3. ☐ Drain: Size and pipe material

Type: Surface Roof

GPD Discharge: _____

** Shop Drawings of proposed pipe and appurtenances i.e., Fire Hydrants, Gate Valves, Manholes and Catch Basins shall be attached and subject to approval. A utility plan stamped by a registered professional engineer and satisfactory to the Town Engineer shall also be attached.

Describe proposed work as a sketch below or attach plans to this application.

Permit No. _____

**INDUSTRIAL USER
SEWER CONNECTION APPLICATION**

To the Town of Milton, Massachusetts: The undersigned, being the

_____ of the property located at
(owner, Lessee, Tenant, etc.)

_____ does hereby request a
(street address)

permit to _____ an industrial sewer connection serving, _____
(install, use) (Name of Company)

which company is engaging in _____

_____ at said location.

- a) A plan of the property showing accurately all sewers and drains now existing is attached hereunto as Exhibit "A".
- b) Plans and specifications covering any work proposed to be performed under this permit is attached hereunto as Exhibit "B".
- c) A complete schedule of all process waters and industrial wastes produced or expected to be produced at said property, including a description of the character of each waste, the daily volume and maximum rates of discharge, and representative analyses, is attached hereunto as Exhibit "C".
- d) The estimated number of full time employees at the premises is _____
- e) The estimated number of part time employees at the premises is _____
- f) The name and address of the person or firm who will perform the work covered by this permit is _____

- g) The standard Industrial Classification (SIC) number for the business is:

In consideration of the granting of this permit the undersigned agrees:

1. To furnish any additional information relating to the installation or use of the industrial sewer for which this permit is sought as may be requested by the Board, the Director, and the Authority.
2. To accept and abide by all provisions of the "Sewer User Regulations" for the Town of Milton, Massachusetts, and of all other pertinent regulations that may be adopted in the future.
3. To operate and maintain any waste pretreatment facilities, as may be required as a condition of the acceptance into the Public Sewer of the industrial wastes involved, in an efficient manner at all times, and at no expense to the Town
4. To cooperate at all times with the Board, the Director, the Authority and their representatives in their inspecting, sampling, and study of the industrial wastes, and any facilities provided for pretreatment.
- 5..To notify the Director and the Authority immediately in the event of any accident, negligence, or other occurrence that occasions discharge to the Public Sewers of any wastes or process water not covered by this permit.
- 6..To commence construction within sixty (60) days of the date this permit is issued:
- 7..Additional Conditions may be attached

Signed _____ Date _____
(Applicant)

(Address of Applicant)

Application approved and permit granted in accordance with the attached conditions.

Signed _____ Date _____
(Director of Public Works)

APPENDIX C
DESCRIPTION OF PERMITS & FEES

Town of Milton
Department of Public Works
Description of Fees

General. It is the stated purpose of these fees to obtain from applicants full cost recovery. Processing applications, providing inspections and reviewing plans is a costly and labor intensive activity. The role of the Department of Public Works is to insure that permits are given lawfully, that the publicly owned infrastructure is protected and that all work in the public way is done in a safe and complete manner. The Department of Public works processes and issues the following types of permits:

- Street Opening/Excavation
- Sidewalk Opening/Excavation
- Curbing removal/cut
- Street or Sidewalk Occupancy
- Sewer Connection
- Drain Connection
- Water Connection

Application Fee. An application fee is charged for each permit issued by the Department. The fee is to cover the administrative cost of processing an application including clerical time, engineering review and field operations review. The application fee is due at the time of application and is not refundable. It is estimated that application review requires between two and eight hours of combined staff time to review.

Inspection Fee. An inspection fee is established to cover the cost of engineering and field personnel involved in the inspection of work within the public way. The Department of Public Works is responsible for insuring that work is done in accordance with specifications, which have been established to protect the Town's investment in a public works infrastructure. The inspection includes both field observations of the actual work as well as review of as built drawings by engineering personnel.

Connection Fee. A connection fee is charge to recoup the Town's capital investment in the provision of its infrastructure. New connections benefit from the investment by the users of the system in its capacity. The ability of a system to accommodate new users is at a cost to which the user/investors are entitled.

**Town of Milton
Department of Public Works
Schedule of Fees**

Application Fee **\$75.00**

(non refundable)

For each new sewer, water,
street opening, second curb
cut or street/sidewalk occupancy
permit. Due at time
of application.

Inspection Fee

For each new sewer, water or
Drain connection. **\$500.00**

New Connection Fees:

Sewer	\$1,000.00 per equivalent unit (see attached)
Sewer Mitigation	\$4,000.00 per equivalent unit (see attached)
Water	\$1,000.00 per inch of connection size plus cost of meter at Town bid price.
Drain	\$10.00 per 25 sq feet of impervious surface

Deposits:

Sewer, Water and Drain **\$2,500.00 each**

Refunded upon satisfactory completion of work and submission of as built plans
to the Town Engineer.

Town of Milton
Sewer Permit Fees
August 2003

Application/Connection Fee. The following fees are non-refundable:

Residential	\$1,000 per equivalent unit (\$1,000 minimum)
Non-Residential	\$1,000 per equivalent unit (\$1,000 minimum)

The Application/Connection fee shall be calculated using "Unit Equivalencies" which are based on the sanitary sewer flow rates described in the Massachusetts Title V Regulations, 310 CMR 15.00, and described as follows:

- One (1) unit is equal to three (3) bedrooms is equal to 330 gpd is equal to 4,400 square feet.
- Residential Equivalency units shall be calculated in thirds with a minimum unit equivalency of one (1). For example, a four-bedroom house would pay an application/connection fee of \$1,400 (one and one third (1 1/3) unit equivalencies times \$1,000). All dollar values shall be rounded up to the nearest one hundred dollars.
- Non-Residential (Commercial/Industrial) Equivalency Units shall be calculated as whole units (all decimals shall be rounded up to the nearest whole number) with a minimum application/connection fee of \$1,000. For example, a 40,000 square foot office building would pay a \$10,000 application/connection fee (10 unit equivalencies times \$1,000).
- Unit equivalencies for all facilities connected to the Town's Wastewater System shall be determined using Title V flows and the equivalencies stated above.

Deposits Required

As-built sanitary sewer system plan by Professional Engineer:
\$2,500.00
Sanitary sewer inspection by Town
\$500.00

I/I Mitigation Fee

All new connections to the municipal sanitary system shall be charged a one-time I/I fee in accordance with the following fee schedule:

<u>Use</u>	<u>Required Fee</u>
------------	---------------------

Residential

\$4,000.00/unit equivalency or four for one removal as described under Non-residential Use

Non-residential

Applicant must remove 4 gallons of I/I from the sewer system for each 1-gallon of wastewater flow requested in the permit (Title 5 (310 CMR 15) shall be used to determine flow rates)

of public works —

If there are not sources of I/I that, at the discretion of the Director, are appropriate for removal at the time of the permit, a monetary fee may be required. The fee shall be calculated based on Title 5 flows, a 4 to 1 removal factor, and a cost of \$3.00 per gallon of flow per day. For example, a 10,000 square foot office building has an associated Title 5 flow of 750 gpd; therefore the fee for this connection is \$9,000 (750gpd x 4 x \$3.00). The Director may also request a combination of I/I removal and monetary fees.

Unit equivalencies shall be determined as described above under connection fees.

Any flow allowance provided by the removal of I/I from the sewer system as part of the I/I Mitigation Fee shall be the property of the Town of Milton and may not be applied to future removal requirements without the written authorization of the Director.

APPENDIX D
**REQUIREMENTS FOR PROPOSED PLANS & ASBUILT SEWER
PLANS**

REQUIREMENTS FOR PROPOSED PLANS & ASBUILT PLANS

Sec. 1-1. Proposed Plans

The following specifications are minimum requirements for the proposed plan to be accepted:

- a) All elevations shall be given relative to Milton Town Base. The following elevations are required.
 - Invert of building sewer connection at the foundation wall and at the connection to the main sewer
 - Rims and inverts of town sewer manholes at each end of service connection to town sewer main
 - Basement floor and first floor of building
 - Topography of entire work area (home, sewer, water, etc.), proposed and existing contours
 - A firm benchmark will be shown on plan to check elevations
 - Plan and profile of sewer showing lengths, slopes, pipe material and diameter
- b) A sewage flow estimate is required (110 gallons per bedroom).
- c) Location of new water service and gate will be shown on plan.
- d) All town utilities will be shown on plan.
- e) Typical details of trench and structures.
- f) French drains and dry wells will be shown on plans.
- g) Pipe Material: An individual sewer service shall be a minimum of six (6) inches in diameter, pressure-fitted, type SDR, Polyvinylchloride (PVC) pipe or ductile iron (class 52). Fittings and pipes shall conform to ASTM standard specifications and Town specifications.
- h) The following shall be noted on the plans in the note section of the plans being submitted:
 - Minimum pitch is 1/4-inch (2 %) per foot for sewer service (max 8 %)
 - All sewer services shall run in a straight line, any change in direction requires a clean-out or manhole
 - There shall be a minimum of 4' of cover above sewer service or if minimum cover can not be used, pipe will be insulated
 - A clean out is required 10 feet outside of building. Pipe will be PVC schedule 40 or ductile iron within 10 feet of the building.
 - Eight inch and above mains will be independently pressure tested and manholes will be independently vacuum tested
 - Castings and covers will be town specification (LeBaron).
 - Doghouse manholes can **not** be used.
 - All pipes, joints and structures are watertight. No cement mortar joints

- will be permitted
- Manholes will be cored for pipes
- Top of cesspool will be crushed and cesspool will be filled with gravel
- Metallic tape will be used one foot above service
- All chimney connections shall be encased in concrete
- Water service is a minimum 10 feet from sewer
- Any deviations from plan and specifications, drain layer will call professional engineer and Milton Engineering Department
- i) The following note shall be on plans in its entirety:
 - "A preconstruction meeting with the Milton Engineering Department, design engineer and contractor will occur prior to construction of sanitary sewer."
 - "The Contractor shall not backfill any portion of the sewer trench until the pipe and manholes have been inspected and approved by the Milton Engineering Department or their designated representative."

Note ~ If the proposed site is within 100 feet of wetlands or within 200' of a perennial stream an Order of Conditions must be obtained from the Milton Conservation Commission and the wetlands boundary and buffer zone must be shown on the plan.

Sec. 1-2. Asbuilt Plan

The following specifications are minimum requirements for as-built plan to be accepted.

- a) Plan and profile of all sewer services (lengths, slopes, rims, inverts, etc.).
- b) Location of any manholes, water gates, utilities, cesspools, french drains, etc.
- c) Location of all new installations and material of manholes, wyes, 3-way tees, bends and other appurtenances.
- d) Swing ties shall be used for all sewer and water appurtenances (sewer clean outs, bends, water gates, etc.)
- e) Length to service connection from nearest manhole.
- f) Invert elevation of all sewer services at the manholes, house and clean outs.
- g) Depth of sewer service, clean outs and connections.
- h) Size and type of all pipes, manholes, etc.
- i) Show all utilities encountered. If damaged, show a detail on the repair.

Note ~ If any testing was required, all test results shall be submitted with the asbuilt plan.

APPENDIX E
TECHNICAL STANDARDS

TECHNICAL STANDARDS

Sec. 1-1. Technical Standards

Any person or utility having first obtained a street opening permit shall be fully responsible for restoring streets and their appurtenances (e.g. granite curb, under-drain, filter fabric, sewer and drainage structures, etc.) in complete compliance with the Town's Technical and Design Standards and Guidelines.

Sec. 1-2. Excavation Requirements

The following requirements shall apply to all excavations in the right of way:

- a) All work must be conducted in strict accordance with the latest regulations of OSHA for excavations.
- b) All excavations shall be performed in accordance with Town of Milton standards or in a manner as prescribed by the Director of Public Works for circumstances not covered by the standards.
- c) All material excavated from trenches and piled adjacent to the trench or in any street shall be piled and maintained in such manner as not to endanger those working in the trench, pedestrians or users of the streets, and so that as little inconvenience as possible is caused to those using streets and adjoining property.
- d) Where the confines of the area being excavated are too narrow to permit the piling of excavated material beside the trench, the town shall have the authority to require that the permittee haul the excavated material offsite.
- e) It shall be the permittee's responsibility to secure the necessary permission and make all necessary arrangements for all required storage and disposal sites.
- f) Temporary or permanent sheeting must be used to support the sidewalls where necessary to prevent undermining of the pavement and/or maintenance of traffic or safety of personnel.
- g) The permittee shall make every effort to keep the amount of pavement damage to a minimum. All excavations in pavement shall meet the following at a minimum:
 - Pavement shall be cut in a rectangular shape to ensure proper repair.
 - Any pavement damage created by permittee's excavation shall be repaired by the permittee.
- h) All excavations on paved street surfaces shall be pre-cut in a neat straight line with pavement breakers or saws.
- i) Cutouts of the trench lines must be normal or parallel to the trench line. No irregular shapes will typically be allowed.
- j) Pavement edges shall be trimmed to a vertical face and neatly aligned with the centerline of the trench.
- k) Unstable pavement shall be removed over cave-outs and over-breaks; and the sub-grade shall be treated as the main trench.
- l) The permittee shall not be required to repair pavement damage outside of the requirements of Section 4.04 existing prior to the excavation unless his or her cut

results in small floating sections that may be unstable, in which case, the permittee shall remove the unstable portion and the area shall be treated as part of the excavation.

- m) When two or more street openings are made under the same permit in sequence ten (10) feet or less (edge to edge) between each adjacent opening, the permittee shall neatly cut and remove the area of pavement between these adjacent openings and shall repair the entire area as one trench.
- n) Where additional excavations are made for the same client or utility which are within ten (10) feet (edge to edge) of previous excavations still under a guarantee period, the permittee shall neatly cut and remove the area of pavement between these adjacent openings and shall repair the area between openings and the most recent opening as one trench.

Sec. 1-3. Backfill Requirements

The requirements of this Section are intended to maximize compaction and therefore minimize settling.

- a) All work must be conducted in strict accordance with the latest regulations of OSHA for excavations.
- b) All work must be protected from freezing.
- c) Whenever water is found standing in the excavation area, the water shall be removed by pump or other means before backfilling operations can commence.
- d) The Permittee shall perform backfilling of excavations as soon as practicable so that the least possible subsequent settling will occur. Before backfilling operations shall begin, the Permittee must notify the Director, allowing adequate time as determined by the Director for inspection.
- e) Bank-Run gravel material selected from the spoil, or delivered to the site, shall be spread in layers not exceeding eight inches (8") in loose depth and thoroughly compacted around and under the appropriate bedding material for any substructure, and used as backfill up to the bottom of the pavement structure sub-base/processed gravel.
- f) Where the excavated material is primarily clay, it shall be allowed for use as backfill only upon the express approval of the Director, with the intention of minimizing differential settling.
- g) All remaining excavated material shall be removed from the job site and disposed of, as the Permittee's responsibility, in such a manner that will minimize interference with pedestrian and vehicular traffic. No material shall be left within the right-of-way once the repair and/or installation is complete.
- h) The Town will allow, as an alternate, digable, pourable backfill, otherwise known as Controlled Density Fill (CDF), under the following conditions:
 - Only Type 1E and Type 2E, Excavatable, Flow able Fill will be allowed. These mixes are designed to have very flow able characteristics for filling small areas or hard to reach areas such as multiple duct trenches whereby compaction equipment maneuvering would be difficult.
 - This material is not to be used for bedding material or in situations that will

cause floating of the utility lines, or in the presence of cast iron or steel pipes.

- CDF placement in trenches must be fully barricaded or police protected for a minimum of three (3) hours after the pour or until a set is reached that will prevent a hazard to animals or humans.

Sec. 4.04 Restoration of Streets

- a) If excavation (or pavement damage) occurs at or within twenty-four (24) inches of the edge of pavement, the permittee shall be responsible for repair to the edge of pavement.
- b) Where two (2) or more street openings are made under the same permit in sequence seven (7) feet or less (edge to edge) between each adjacent opening, the permittee shall be responsible for repairing the entire area between openings measured from the first opening through to the last opening.
- c) Where additional excavations made for the same client or utility are within seven (7) feet (edge to edge) of previous excavations still subject to a guarantee, the permittee shall be responsible for repairing the area between openings.
- d) Upon the completion of proper backfilling, the Permittee shall construct temporary pavement. (See section 4.08 (G) for details of construction methods.)
- e) Before paving operations shall begin, the permittee must notify the Director, allowing adequate time as determined by the Director for inspection. Notification of the anticipated timing of all paving activity must be acknowledged by the Director; any notification delivered by facsimile machine must be preceded or followed up by a telephone conversation to assure its proper and timely receipt.
- f) Permittees shall endeavor to make notification by 9:00 AM of each workday that paving is anticipated. In the event of schedule changes or emergencies, the permittee is requested to provide a minimum of one-hour notification to assure inspection availability.
- g) All hot-mixed asphalt paving must first be approved by the Director or designee as to depth and materials.
- h) Should the circumstances of the trench backfilling require City personnel to be on-site after 4:00 PM, or on holidays, the permittee shall be required to pay for the cost of overtime (one and one-half hours, minimum, as required by current Union contracts).
- i) If a City inspector is not able to be on-site within 30 minutes of the acknowledged anticipated start time of paving activity, the permittee shall be allowed to commence paving in accordance with this Section.
- j) All temporary pavement shall be installed according to these specifications which include a minimum of three (3) inch thickness hot-mixed asphalt Grade B placed in two (2), one and one half (1 ½") inch compacted lifts.
- k) The temporary pavement shall meet the guarantee standard of Section 4. 10 for the applicable guarantee period of Section 4.09.
- l) Hot-mixed asphalt paving of trenches greater than one hundred (100') feet in length shall be paver applied unless otherwise authorized by the Director.
- m) The Permittee shall be responsible for the proper placement and maintenance of the

temporary pavement and shall keep the temporary pavement level with the surface of the surrounding existing pavement and in proper repair and condition, within the tolerances provided in Section 4. 10, until the end of the guarantee period.

- n) Any street markings or traffic loops disturbed by the permittee shall be promptly replaced by the permittee.
- o) It shall be the responsibility of the Permittee to perform the necessary restoration beyond the limits of the pavement which shall include but not be limited to restoration of lawns, esplanades, shrubs, gardens, curbing, sidewalks, under-drains, separations fabrics, fences, walls, etc.
- p) Upon completion of the permanent repairs outside the limits of the pavement, the Permittee shall notify the Director of Public Works in writing that the permanent repairs or replacement has been completed, setting forth the date of completion. The Permittee shall, and has the duty and responsibility to, maintain the replacement area outside of the pavement for a period of five (5) years after completion.
- q) Refilling of bar holes. Any person or utility making bar holes in the street or sidewalk of any public place shall immediately, upon completion of the work, fill these bar holes by the use of an approved asphalt plug, cold patch or hot mix.

Sec. 1-4. Permanent Pavement Restoration:

Permanent restorations shall not be allowed to commence until at least one (1) winter moratorium cycle has passed since the installation of approved temporary hot-mixed asphalt.

Sec. 1-5. Material Specification

- a) Bank-Run Gravel shall meet Massachusetts Standard Specification M1.03.0, Type C. Bank-run gravel shall be granular material well graded from fine to coarse with a maximum size less than 2 inches, obtained from approved natural deposits and unprocessed except for the removal of unacceptable material and stones larger than the maximum size permitted. It shall not contain vegetation, masses of roots or individual roots more than 12 inches long or more than ½ inch in diameter. It shall be substantially free from loam and other organic matter, clay and other fine or harmful substances.
- b) Processed Gravel shall meet Massachusetts Standard Specification M1.03.1. Processed gravel shall consist of hard, durable stone and coarse sand. Approved source material shall be processed by mechanical means. Material shall be well graded and stockpiled in such a manner to prevent segregation of particles. Material shall be free of loam, clay or other deleterious material.
- c) Processed Sand shall meet gradation requirements of Massachusetts Standard Specification M1.04.0 Type A. Processed sand shall consist of clean inert, hard, durable grains of quartz or other hard durable rock, free from loam or clay, surface coatings and deleterious materials. The allowable amount of material passing a No. 200 sieve shall not exceed 10 percent by weight.
- d) Crushed Stone shall meet the gradation requirements of Massachusetts Standard Specification M2.01.0. Crushed stone shall be screened and well graded in size and

shall consist of clean, hard, and durable particles of rock, free from dirt, vegetation or other objectionable matter, and free from soft, thin elongated, laminated or disintegrated pieces.

- e) Dense Graded Crushed Stone shall meet Massachusetts Standard Specification M2.01.7. The dense graded crushed stone shall be uniformly mixed and well graded in size. The crushed stone shall be uniformly mixed coarse and fine aggregates. Coarse aggregates shall consist of hard durable, particles or fragments of stone or gravel. Fine aggregates shall consist of natural or crushed stone. The composite material shall be free from clay, loam, or other deleterious material.
- f) RipRap shall meet Massachusetts Standard Specification M2.02.3.
- g) Binder Course shall meet Class I Bituminous Concrete Pavement, "Binder Course," of the Massachusetts Standard Specification M3.11.00.
- h) Wear Course shall meet Class I Bituminous Concrete Pavement, "Top Course," of the Massachusetts Standard Specification M3.11.00.
- i) Tack Coat shall be emulsified asphalt, grade RS-1 and shall conform to Massachusetts Standard Specifications M3.03.0.
- j) Welded Steel Wire Fabric shall be six inch by six inch (6" x 6") mesh with No. 10 wire and shall conform to the requirements of AASHTO designation M55, Welded Steel Wire fabric for Concrete Reinforcement. Substitution of welded wire fabric with FIBERMESH fibers (100% virgin polypropylene, collated, fibrillated fibers) at a rate of 1.5 lb. Per cubic yard of concrete will be allowed for non-structural reinforcement. Installation shall be per manufacturer's recommendations.
- k) Controlled Flowable Fill (CDF) shall meet Type 1E CDF or Type 2E CDF and shall be flowable and excavatable. Materials for CDF shall be proportioned to produce a thoroughly workable, plastic mixture resulting in a dense, watertight concrete. When CDF is used around metallic materials, the surfaces shall receive corrosion protection from the CDF or a mix containing zero amounts of fly ash shall be used. The Engineer shall approve corrosion protection. The CDF shall meet the following limitations:
 - Types 1E and 2E CDF shall have a maximum compressive strength of 100 psi at 28 days.
 - Types 1 and 2 CDF shall have a maximum compressive strength of 1000 psi at 28 days.
 - A field pancake test, in accordance with ACI 229R, shall be performed prior to CDF placement.
 - All Concrete shall contain air-entraining and water-reducing admixtures, designed and used in strict accordance with manufacturer's specifications and the approved concrete mix design.

Sec. 1-6. Winter Excavations

If work is conducted in the winter moratorium period, the following specifications shall apply:

- a) The temporary pavement repair shall be hot-mixed asphalt as specified unless hot-mix material is documented to not be available within a seventy-five (75) mile radius of the town.

- b) As an alternate the Permittee may use: (i) Modified Winter patching material as specified in Appendix A placed in one lift of three inches (3) compacted thickness. This material must then be removed within forty-five (45) days of the opening of local hot-mixed asphalt plants and replaced with three (3) inches compacted thickness of hot-mix asphalt as defined in Section 4.08 (G). The applicable guarantee period will begin when the hot-mixed asphalt repair is completed.
- c) No pavement shall be allowed of frozen materials unless it is expressly understood that complete trench reconstruction will be completed by the permittee during the following spring. In this case, the guarantee period begins after the Spring reconstruction by the permittee. In all cases of modified Winter patching material use, the permittee shall take all reasonable measures, including blotting the material, to prevent against vehicular or pedestrian tracking of the asphalt material.

Sec. 1-7. Methods of Construction

Workmanship:

- a) The Permittee is required to furnish all materials and will be required to utilize quality workmanship and construction techniques conducted in accordance with industry standards for the successful completion of the utility work, backfilling, appurtenant restorations and temporary pavement repair.
- b) The Permittee shall keep a competent foreman and sufficient competent employees to carry on the work with all proper speed and in accordance with the requirements of law and other public authorities and to the reasonable satisfaction of the Director.
- c) The Permittee shall conduct the work in such a manner not to unreasonably interfere with other work being done by the Town, by contract or otherwise. If deemed necessary by the Director, the work done under these specifications shall conform to the progress of said other work. The Permittee shall cooperate with the contractors or employees who may be doing work for the Town, and with public service corporations affected by the work in arranging for storage places, temporary support for structures, repairs, etc.
- d) All temporary repairs must be maintained by the Permittee until the end of the guarantee period or until permanent repair has been made, whichever first occurs.

Placement of Backfill Material

- a) The backfill material shall be spread and compacted in layers not exceeding eight inches (8") in loose depth.

Placement of Crushed Type D Gravel

- a) The aggregate pavement structure sub-base shall be spread and compacted in layers not exceeding eight (8") inches in depth. The crushed aggregate shall be compacted to not less than 95% of the maximum dry density of the material, ASTM D1557.
- b) The maximum dry density of the material to be used as subbase along with the corresponding moisture contents, in accordance with ASTM D1557, must be filed at the time of application to obtain the permit. Single source documentation will be acceptable for multiple permits in a season, provided that every stockpile utilized is

accounted for.

Placement of Processed Gravel

- a) The aggregate pavement structure base shall be compacted to not less than 95% of the maximum dry density of the base material, ASTM D1557, to the depth required by the City's Technical and Design Standards and Guidelines.
- b) The maximum dry density of the material to be used as base along with the corresponding moisture content, in accordance with ASTM D1557, must be filed at the time of application to obtain the permit. Single source documentation will be acceptable for multiple permits in a season, provided that every stockpile utilized is accounted for.

Temporary Asphalt Pavement

- a) All temporary pavement shall be installed according to these specifications which include a three (3) inch (minimum) thickness of Grade B hot-mixed asphalt placed in two or more, 1 1/2" compacted lifts. All materials, placement, compaction and workmanship shall be in accordance with the applicable provisions of the Main Department of Transportation Standard Specifications for this material.
- b) Each 1 1/2" layer of hot-mixed asphalt is to be compacted separately meeting the requirement of 92% minimum compaction of standard of standard laboratory maximum theoretical density for the specific material.
- c) Mechanical compactors will be permitted for repairs less than 10 square yards; repairs exceeding 10 square yards shall be rolled with an appropriately sized, power driven, steel-wheeled roller to obtain specification density.
- d) Hot-mixed asphalt materials shall be laid upon an approved clean, dry, compacted surface, spread and struck off to the established grade and elevation giving regard to the loss in depth between loose and compacted mixtures.
- e) Immediately after the bituminous mixture has been spread, struck off, and surface irregularities adjusted, it shall be thoroughly and uniformly compacted.
- f) The placing temperature of the hot-mixed asphalt mixture shall be between 325°F and 255°F. All compaction rolling shall be completed before the mixture cools below 185°F. This can be checked using a thermometer suitable for this type of work.
 - Temporary paving material shall be saw cut and neatly removed, or milled, as needed to comply with all provisions of this subsection.
 - Pavement structure base and sub-base should be checked for compliance with 95% compaction requirement, if the permittee elects or is required to remove the entire temporary paving material. If compaction is found to be less than 95%, trench must be re-compacted to meet specifications before paving will be allowed.
 - The surrounding pavement shall be milled a minimum of twelve inches (12") beyond the original excavation cut, and to a depth of one and one-half (1 1/2) inches, minimum.

Permanent Pavement Restoration

- a) The permanent pavement depths shall match the existing depths, or whichever is greater. The requirement to match existing depths shall be waived if the permittee is able to show good cause, including demonstrated performance.
- b) Each 1 ½" layer of hot-mixed asphalt is to be compacted separately meeting the requirement of 92% minimum compaction of standard laboratory maximum theoretical density for the specific material.
- c) Mechanical compactors will be permitted for repairs less than 10 square yards; repairs exceeding 10 square yards shall be rolled with an appropriately sized, power driven, steel-wheeled roller to obtain specification density.
- d) Hot-mixed asphalt materials shall be laid upon an approved clean, dry, compacted surface, spread and struck off to the established grade and elevation giving regard to the loss in depth between loose and compacted mixtures.
- e) Immediately after the bituminous mixture has been spread, struck off, and surface irregularities adjusted, it shall be thoroughly and uniformly compacted.
- f) The placing temperature of the hot-mixed asphalt mixture shall be between
- g) 325°F and 255°F. All compaction rolling shall be completed before the mixture cools below 185°F. This can be checked using a thermometer suitable for this type of work.
- h) Permanent restoration shall be as shown on the typical street replacement detail.

"Tack" Coating

- a) All vertical surfaces of the existing hot-mixed asphalt pavement shall be tack coated with an approved asphalt emulsion by thoroughly swabbing or brushing the vertical edges to fully cover with the liquid material prior to pavement installation.

"Top" Joint Sealing

- a) All top surface joints between the pavement repair and the existing pavement are to be sealed with an asphaltic emulsion by swabbing or brushing a minimum three (3) inch width paint-like application over the joint to seal the surface air voids.

Depth of Substructures

- a) No person or utility shall, without written permission from the Town, install any substructure, except manholes, valve casings, culverts, and catch basins at a vertical distance less than:
 - Twenty-four (24) inches below the established flow line of the nearest gutter. If the flow line is not established, then the depth shall be at a minimum of twenty-four (24) inches below the surface of the nearest outermost edge of the traveled portion of the street.
 - The minimum depth of any substructure shall be twenty-four (24) inches below the established gutter grade when the substructure parallels the street.
 - The minimum depth of any substructure shall be twenty-four (24) inches below the established sidewalk or curb when such substructure is at a

right angle to the street.

- b) The minimum depth of any substructure on any other public way shall be twenty-four (24) inches below the surface; provided, however, that the Town may permit a lesser depth in special cases.

Nothing in this section shall impose a duty upon the Permittee to maintain the specifications as required herein upon subsequent changes of grade in the surface unless the grade in the substructure interferes with the maintenance of or travel on a public street.

Sec. 1-8. Guarantee Period

All street excavation repairs shall be guaranteed to conform to the requirements of Section 4.10 for a minimum of three (3) years.

Sec. 1-9. Definition of Guaranteed Pavement Repair Condition

Pavement repairs guaranteed by each permittee shall meet all of the following conditions in order to remain in conformance with these Rules & Regulations.

- a) Severe [over one inch (1")] distortion conditions shall be considered Tort liability and street defect conditions and shall necessitate that full repairs be completed within twenty-four (24) hours of notification by the Town.