

**WATER POLLUTION CONTROL AUTHORITY  
TOWN OF BROOKFIELD, CONNECTICUT**

**RULES AND REGULATIONS**

**ADOPTED**

**April 6, 1976**

**Amended 4/27/76, 7/29/76, 9/15/76, 6/24/87, 6/22/94,  
3/22/01, 9/29/10, 1/11/12, 1/23/13, 6/26/13, 8/27/14,  
3/22/17, 1/23/19, 2/26/20, 6/24/20, 10/28/20,  
12/15/21, 10/26/22, 4/26/23, 04/24/24, 5/22/24, 6/26/24  
(Effective 06/26/24)**

BROOKFIELD WATER POLLUTION CONTROL AUTHORITY  
SEWER USE RULES and REGULATIONS

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## **APPENDIX**

Excerpts from Connecticut Public Health Code, Onsite Sewage Disposal Regulations and Technical Standards for Subsurface Sewage Disposal Systems, January 1, 2023, Table 1, Tables 2, 2-A, 2-B and 3

## **DRAWINGS**

Sheet 1 through Sheet 4 entitled “Standard Construction Details Water Pollution Control Authority Brookfield, Connecticut” dated 1/8/10, prepared by Birdsall Services Group, Engineers and Consultants, Birdsall Engineering, Inc.; and revised by Langan CT Inc. 06/26/2024.

## **GENERAL NOTES**

The Brookfield Water Pollution Control Authority (BWPCA) follows guidance from the Connecticut Public Health Code – On-site Sewage Disposal Regulation and Technical Standards for Subsurface Sewage Disposal Systems, last Revised January 2023, (Public Health Code) attached hereto and made part of these Regulations. If there is information within this document that conflicts with the Public Health Code, then the Public Health Code shall govern. If the Brookfield WPCA has requirements in this document that are more restrictive than the Public Health Code, then the BWPCA code shall govern. The BWPCA has the authority to deviate from design guidance on a case-by-case basis, as necessary.

Additionally, the BWPCA follows guidance from the Guides for the Design of Wastewater Treatment Works 2016 (TR-16), or latest revision. The BWPCA has the authority to deviate from design guidance on a case-by-case basis, as necessary.

Connecticut Department of Energy & Environmental Protection (CT DEEP) General Permit Note Regarding Permit DEP-WPED-GP-008 for Categorical Industrial User Wastewater to a Publicly owned Treatment Works (POTW):

This general permit applies to wastewaters discharging from facilities subject to 40CFR Part 403.6 National Pretreatment Standards: Categorical Standards. The first categorical wastewater covered by this general permit is Metal Finishing Wastewater which is wastewater subject to the provisions of 40 CFR 413 (Electroplating Point Source Category) or 40 CFR 433 (Metal Finishing Point Source Category). A registration is required to be submitted to the department that includes a site plan, discharge information, any water conservation practices employed, information on wastewater treatment processes used, line and process flow diagrams, checklists for operation and maintenance plans, spill control plans, and solvent management plans, and a Discharge Monitoring Report subscriber agreement for the electronic reporting of compliance information. Each registration must be reviewed and certified by a "Qualified Professional Engineer" as defined in the general permit. Discharge flows less than 10,000 gallons per day (gpd) pay a registration fee of \$3,125 while flows equal to or greater than 10,000 gpd pay a registration fee of \$6,250. Effluent limits are established by a table in the permit. Some limits can be more stringent if the POTW receiving the discharge has a history of difficulty in meeting

certain water quality based limits. Discharge monitoring frequency ranges from once per month to weekly depending on the discharge flow. Registrations must be approved before the discharge is authorized and approvals of registration are **transferable**. The Department response time following submittal of a complete registration will be typically less than 90 days.

Connecticut Department of Energy & Environmental Protection (CT DEEP) General Permit Note Regarding Permit DEE-WPED-GP-018 for domestic sewage:

This general permit applies to discharges of domestic sewage from a community sewerage system to a Publicly Owned Treatment Works (POTW). Registration is required for discharges from a community sewerage system. Privately owned "community sewerage systems" (such as those at condominiums) are to be properly managed and have a valid community sewerage system agreement with the municipality receiving the discharge as required by section 7-246f of the General Statutes. Municipalities seeking to initiate, create or originate a discharge from a community sewerage system do not need to register. For all other discharges of domestic sewage to a POTW no registration is required to be submitted in order for the discharges to be authorized by this general permit. Registrations are non-transferable.

Connecticut Department of Energy & Environmental Protection (CT DEEP) General Permit Note Regarding Permit DEEP-WATERP&S-GP-001 for Food Service Establishment Wastewater:

This general permit authorizes any wastewater discharge associated with a facility, as defined in the general permit, which discharges to a municipal sewer system, to limit the amount of FOG of all Class III and IV food service establishment discharges by installing either an outside grease trap/interceptor, an Active Grease Recovery Unit (AGRU), or Super-capacity Grease Interceptor (SCGI) in accordance with technical requirements specified in the general permit. The authorized agent approves the FOG management equipment to be installed. No registration is required in order for the discharges to be authorized by this general permit. Upon a change in ownership or the permittee, the new owner or permittee shall comply with all applicable conditions and requirements of this general permit.

Connecticut Department of Energy & Environmental Protection (CT DEEP) General Permit Note Regarding Permit DEP-WPED-GP-012 for the Miscellaneous Discharges of Sewer Compatible (MISC) Wastewater:

The Miscellaneous General Permit was revised in 2013 (and modified in 2017) to combine discharges from many of DEEP's separate wastewater general permits that discharge to the sanitary sewer. Some individual permit holders may now be able to transfer their wastewater discharge coverage to the Miscellaneous General Permit. This general permit now categorizes discharges into three discharge groups. Group I discharges include air compressor condensate or blowdown, boiler blowdown, contact cooling and heating wastewater, cutting and grinding wastewater, non-destruct testing rinsewater, printing and photo processing wastewater, tumbling or cleaning of parts wastewater, water treatment wastewater, and *other* (formerly undesignated) Miscellaneous wastewater. Group II discharges include non-contact cooling water, hydrostatic pressure testing wastewater, commercial laundry wastewater, food processing wastewater, and

reverse osmosis reject wastewater. Group III discharges include building maintenance wastewater, fire suppression testing wastewater, swimming pool wastewater and potable water system maintenance or sampling wastewaters. The general permit authorizes discharges to a Publicly Owned Treatment Works (POTW or sewage treatment plant) either directly via a sanitary sewer, or to a holding tank that meets the requirements of the general permit. The wastewater in the holding tank must then be transported to a POTW by a properly licensed transporter. There is no limit under the general permit to the maximum daily flow of the wastewater as long as the POTW receiving the discharge has approved the flow. Registration under the Miscellaneous General Permit is required for: 1) Group I discharges that have a cumulative maximum daily flow greater than 1000 gallons per day or 2) Group II discharges that have a cumulative maximum daily flow greater than 5000 gallons per day. For discharges less than the above-stated flows or any Group III discharges, registration is not required, although such discharges are required to comply with this general permit. In addition, depending on the flow and/or whether treatment of the wastewater is required to meet the effluent limits of the Miscellaneous General Permit, registration followed by a written approval from the Department may be required for the discharges to be authorized by this general permit. See the actual general permit for complete requirements. Approval of Registrations/Registrations are transferrable.

Refer to CT DEEP list of Current General Permits for additional information.

**BROOKFIELD WATER POLLUTION CONTROL AUTHORITY  
SEWER USE RULES AND REGULATIONS**

**1.0 SEWER CONNECTION AND DISCHARGE PERMITS**

No person shall uncover, make any connection with or opening into, alter, repair, disturb, use or discharge to any public sewer or appurtenance thereof without first obtaining a written Sewer Connection Permit and a Sewer Discharge Permit from the Brookfield Water Pollution Control Authority (hereafter "Authority"). No person shall increase the volume of sewage, nor change the character of pollutants discharged to the sewer system, nor expand or change the use of any premises, without first obtaining a written Sewer Discharge Permit from the Authority. No certificate of occupancy issued by the Building official shall entitle the recipient to use or discharge to the public sewer in the absence of a Discharge Permit issued by the Authority. The Discharge Permit shall be subject to the requirements of and the limitations imposed by these Sewer Use Regulations and ordinances of the Town of Brookfield.

**1.0.1 PAYMENT OF DELINQUENT CHARGES AND ASSESSMENTS**

No Sewer Connection Permit shall be issued and no Authority sign off for building permit purposes shall be issued by the Authority with respect to any property for which sewer use, connection or other charges or assessments are delinquent. Each applicant for, or person desiring or requiring a Sewer Connection Permit or an Authority sign off for building permit purposes shall pay all delinquent sewer use, connection and other charges and assessments with respect to the property for which such permit or sign off is sought prior to the issuance of such Sewer Connection Permit or Authority sign off with respect to such property.

Similarly, no Sewer Discharge Permit or Authority sign off for building permit purposes shall be issued by the Authority with respect to any property for which sewer use, connection and other charges or assessments have become delinquent subsequent to issuance of a Sewer Connection Permit.

For purpose of these regulations, sewer use, connection and other charges and sewer assessments payable in installments shall be considered delinquent if they remain unpaid for thirty (30) days following issuance of a bill for same. Delinquency shall include all costs, including attorney's fees, incurred by the Authority in collecting such unpaid amounts.



## **1.1 SEWER CONNECTION PERMIT - PROCEDURE**

### **1.1.1 FILING: APPLICATION FOR SEWER CONNECTION PERMIT**

Any property owner or other person desiring to discharge sewage to the public sewer system, to increase the volume of sewage discharged to the public sewer system, to change the character of the pollutants being discharged to the public sewer system, or to change the use of any premises discharging to the sewer system shall file an application for a Sewer Connection Permit with the Authority. All applications shall be signed by the owner of the subject property and by the design engineer.

### **1.1.2 RESIDENTIAL / MULTI-FAMILY PERMIT**

In the case of an application for a Sewer Connection Permit for a single-family dwelling or a multi-family dwelling complex, the Applicant shall submit the following information in such form as may be required by the Authority:

- a) Type of sewage;
- b) Number of separate dwelling units;
- c) Estimated daily peak and daily average sewage flows;
- d) Name and address of design engineer;
- e) Plans of the proposed sewerage facilities. Plans for multi-family residences shall be sealed by a licensed professional engineer;
- f) Name and address of licensed installer;
- g) Information on the status of the project before the Town's other land use commissions;
- h) For a multi-family dwelling complex, information on the planned future ownership of the complex, i.e., whether it will be an apartment complex in one ownership, or whether it will be owned in as a common interest ownership community (e.g., condominium);
- i) Such other information as the Authority may require; and
- j) Such fees as may be required by the Authority.

### **1.1.3 COMMERCIAL PERMITS**

In the case of an application for a Sewer Connection Permit for commercial uses or establishments, the Applicant shall submit the following information in such form as may be required by the Authority:

- a) Type of sewage; if non-domestic, include complete listing of constituent chemicals and concentrations;
- b) Estimated daily peak and daily average sewage flows;

- c) Number of separate commercial units;
- d) Type or types of business(es);
- e) Name and address of design engineer;
- f) Plans of the proposed sewerage facilities, sealed by a licensed professional engineer;
- g) Name and address of licensed installer;
- h) Nature, type and size of grease or oil producing facilities and expected quantity per day of grease or oil to be discharged;
- i) Information on the status of the project before the Town's other land use commissions;
- j) Such other information as the Authority may require; and
- k) Such fees as may be required by the Authority.

#### **1.1.4 INDUSTRIAL PERMITS**

In the case of an application for a Sewer Connection Permit for industrial establishments, the Applicant shall submit the following information in such form as may be required by the Authority:

- a) Copy of permit issued by the Department of Environmental Protection under the provisions of Section 22a-430 (Regulations, Section 22a-430-1 et seq.) of the General Statutes;
- b) Nature of industrial waste; if non-domestic, include complete listing of constituent chemicals and concentrations;
- c) Type or types of industrial use / business; include Standard Industrial Classification (SIC) codes and North American Industry Classification System (NAICS) codes;
- d) Estimated average and peak daily discharge of industrial wastes;
- e) Waste characteristics, including temperature, toxicity, flammability, pH, radiation, solids content, and bio-chemical oxygen demand (BOD)
- f) Number of full time and part time persons to be employed;
- g) Nature, type and size of grease or oil producing facilities and expected quantity per day of grease or oil to be discharged;
- h) List of all chemicals to be used on premises, including material safety data sheets (MSDS);
- i) Site Plan, and plans of proposed sewerage facilities, sealed by a licensed professional engineer; and
- j) Such fees as may be required by the Authority.

- k) Copy of permit issued by the Department of Environmental Protection under the authorizing statues of Section 22a-430b of the General Statutes for the General Permit for Discharges of Wastewater from Categorical Industrial Users to a Publicly Owned Treatment Works (POTW);

### **1.1.5 ADDITIONAL SEWER CONNECTION PERMIT APPLICATION REQUIREMENTS**

**1.1.5.1. Building Sewer Plan.** All applicants must file with their application for Sewer Connection Permit a detailed site plan depicting property limits, proposed buildings, grease traps and their connections to the sanitary sewer line. In the case of applications for multifamily, commercial or industrial uses, such plan shall be prepared by a Connecticut licensed professional engineer or land surveyor to the degree of accuracy required of a Class A-2 survey.

**1.1.5.1.A. As-Built Drawings.** All applicants constructing a multifamily, commercial or industrial project involving more than a single building sewer connection, and all applicants constructing an expansion of the sewerage collection system pursuant to an Expansion Permit under Section 4.0 *et seq.* or constructing a Community Sewerage System pursuant to an approval issued pursuant to Section 5.0 *et seq.* of these regulations shall provide the Authority with complete As-Built Drawings (plans and elevations) of such system within thirty (30) days following the completion of such work. Such As-Built Drawings shall conform to the requirements set forth in Section A-5.0 of the Technical Standards. If the applicant proposes to discharge prior to submission and acceptance of such complete As-Built Drawing(s) the applicant may post a cash bond in the amount of \$7,500.00 with the Authority to secure compliance with the As-Built Drawing submission requirement not later than a date to be established by the Authority. Following the continued failure to submit properly completed As-Built Drawings following notice of failure to comply and a twenty-one (21) day opportunity to cure, such cash bond shall be forfeited to the Authority. The Authority shall also have the right to terminate sewer service for failure to comply with the As-Built Drawings submission requirement.

**1.1.5.2 Cash Deposit; Performance Bond.** In order to assure completion of the work associated with any Sewer Connection Permit and compliance with the provisions of Section 2.0 *et. seq.*, of these Regulations, no Sewer Connection Permit shall be issued unless the Applicant has first provided the Authority with a \$750.00 deposit by cash, bank or certified

check to insure completion of the permit work in accordance with the requirements of these Regulations. Upon the satisfactory completion of the permit work, the permittee shall be entitled to the return of the \$750.00 deposit. In the event that the permittee fails to complete the permit work in accordance with these Regulations or in the event that the permit expires, such cash deposit shall be forfeited to the Authority. In lieu of requiring a cash deposit, the Authority may authorize the Applicant to post a performance bond with surety in the amount of not less than Three Thousand Dollars (\$3,000.00) conditioned upon the completion of the permit work and compliance with these Regulations. Persons engaged in the business of making sewer connections may post a performance bond to cover not more than three installations at any one time. When a performance bond is authorized, such performance bond shall be in the form authorized for use by the Authority's Attorney. The surety shall be a company authorized to act as surety by the State of Connecticut and shall be subject to approval by the Authority. Such cash deposit or bond shall be in addition to fees prescribed by the Authority for use by professionals engaged by the Authority or for the costs of inspections.

**1.1.5.3 Waiver of Deposit or Bond.** The Authority may waive the cash deposit and/or performance bond requirement for expansion or change in use of premises or for change in the character of the discharge where no new permit work is required.

#### **1.1.6 APPLICATION IN ANTICIPATION OF FUTURE SEWER EXTENSION**

**1.1.6.1 Application.** An owner planning construction on their property and desiring to install an on-site sewer collection network or laterals during initial site work in order to preclude excavation at a later date may submit an application to have the sewer installation inspected. The inspection will serve to verify that the installation satisfies the requirements of the Authority.

**1.1.6.2 No Commitment to Extend.** The owner applying for such inspection is doing so without any commitment from the Authority to extend sewers to the area of the property nor any commitment to allow the owner to connect to the sewer system if it is extended to the area of the property and will sign an agreement with the Authority stating that they understand this fact.

**1.1.6.3 Fees and Costs.** The owner shall pay all appropriate application fees and costs for inspection, legal, and engineering services and reviews.

### **1.1.7 APPLICATION FOR DISCONNECTION OF EXISTING SEWER SERVICE**

**1.1.7.1 Application.** A property owner planning to disconnect the existing sewer lateral on their property must submit an application for approval of the sewer disconnection and to have the disconnection inspected. The application shall include reasons for disconnection together with an explanation of the disposition/future plans for existing structures.

**1.1.7.2 As-Built Site Plan.** The property owner applying for such disconnection shall submit an as-built plan showing the location or locations of sewer laterals to be disconnected and the proposed methods of disconnecting and removal of the sewer lateral, clean-outs, and plugging of the saddle and or lateral.

**1.1.7.3 Fees and Costs.** The owner shall pay all appropriate application fees and costs for inspection, legal, and engineering services and reviews.

### **1.1.8 APPLICATION FOR BUILDING SEWER MODIFICATION**

**1.1.8.1 Application.** Any property owner planning construction on their property that consists of, or that will result in, a modification to the existing building sewer connection must submit an application for approval of the building sewer modification and to have the building sewer modification inspected during construction. The application shall include reasons for modification together with a building sewer plan in the same manner as detailed in Section 1.1.5.1.

**1.1.8.2 Fees and Costs.** The owner shall pay all appropriate application fees and costs for inspection, legal, and engineering services and reviews.

## **1.2 TREATMENT CAPACITY MANAGEMENT**

Sewage treatment capacity available to the Town of Brookfield is limited. To ensure that the Town does not exceed its available treatment capacity, effective upon BWPCA's Total Future Flow reaching 90% of its allowable discharge, based on 580,000 GPD, no sewer connection or discharge permit shall be issued by the Authority with respect to any property unless that property falls within one of the following categories:

- a) properties which are or have been subject to the levy of a sewer benefit assessment as a result of the construction of municipal sewer facilities;

- b) properties which are subject to an agreement or resolution adopted by the Authority to reserve sewage treatment capacity upon the payment of a sewer capacity reservation fee;
- c) properties determined by the Authority to require an allocation of sewage treatment capacity to effectively abate or mitigate an existing or threatened pollution problem; (An owner claiming to have a failed septic system or a system in danger of imminent failure, shall provide written documentation from a professional engineer licensed in the State of Connecticut and verified by the Town Sanitarian confirming the condition of the system. Discharge shall be limited as necessary to an existing building, facilities and/or uses.);
- d) properties owned by the Town of Brookfield or owned by a not-for-profit organization performing an essential municipal function (e.g., fire, ambulance or rescue services); and

Notwithstanding the foregoing, for vacant properties, no such property shall be permitted a new connection permit based on design flows in excess of 2,000 gallons per day or a discharge calculated at the rate of 400 gallons per day, per acre, whichever is greater<sup>1</sup>. For improved properties presently or previously connected to the municipal sewer, no such property shall be permitted a new connection permit based on design flows in excess of 2,000 gallons per day or 150% of existing or pre-existing design flows, whichever is greater.<sup>2</sup>

Further notwithstanding the foregoing, applications for Sewer Connection and Discharge Permits shall be considered only when the Authority determines that the public sewer system and existing sewage treatment capacity is capable of conveying and adequately treating the sewage to be discharged.

Total Future Flow shall be an official accounting of current flow plus flow projected from approved applications. The current flow will be a 3-month average flow. After approved projects are completed and occupied, the properties shall be removed from the list of projected flows. For the purposes of projecting flow, non-residential properties, including the non-residential areas of mixed-use properties shall be estimated at 50% of the Connecticut Department of Public Health's design flows. Residential units shall have estimated flows of 125 GPD, regardless of the number of bedrooms within said unit.

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<sup>1</sup> Example 1: a vacant 10 acre parcel will be allowed a discharge up to 4,000 gallons per day based on design flows: 400 gallons per day times 10 acres equals 4,000 gallons per day.

<sup>2</sup> Example 2: a property connected or previously connected to the municipal sewer with discharge of 2,000 gallons per day based on design flow may be torn down and permitted an expansion that increases that discharge to a maximum of 3,000 gallons per day. A property with a discharge of 250 gallons per day, however, would be allowed a maximum discharge of 2,000 gallons per day since this is greater than the gallonage calculated at 150% of existing discharge.

### **1.3 CONSIDERATION OF PERMIT APPLICATIONS**

Applications for Sewer Connection Permits which are incomplete or which are not accompanied by the items specified in Section 1.1. of these Regulations shall not be approved.

### **2.0 SEWER CONNECTION PERMIT: STANDARDS OF CONSTRUCTION - LAPSE OF PERMIT**

Upon issuance of a Sewer Connection Permit and the payment by the Applicant to the Authority of a non-refundable Sewer Application Fee in accordance with Section 7.2 et seq. of these Regulations, the Applicant is authorized to construct the building sewer in accordance with the sewer plan, as filed, and subject to the requirements set forth in the Town Ordinances and Regulations governing sewer use. The Application Fee (See Section 7.2.2) shall be paid to the Authority prior to the issuance of the Sewer Connection Permit, customarily upon application for such permit. *NOTE: This fee is in addition to the \$750.00 cash bond.*

The Sewer Connection Permit shall automatically lapse two (2) years after the date of issuance unless a written extension not to exceed a maximum of one (1) year is granted by the Authority prior to the expiration of said two (2) year period. Within such time, the permittee must either a) begin construction of the building sewer or b) complete the connection to the sewer line and obtain an inspection and approval of the connection by the Authority. No discharge to the sewer system shall be permitted until a Sewer Discharge Permit is issued by the Authority and only after the filing of "as-built" drawings and all work, including the actual connection to the sewer line, has been inspected and approved by the Authority.

Once a Sewer Connection Permit has lapsed, a new Sewer Connection Permit application (subject to the requirements of Section 1.2 Treatment Capacity Management) will be required before further authorization to construct and connect the building sewer will be granted. All work on the construction of the building sewer shall immediately cease whenever the Sewer Connection Permit under which it is being performed has lapsed.

#### **2.1.1 SEWER CONNECTION PERMIT: EXISTING BUILDING SEWERS**

Existing building sewers may be used in connection with existing buildings only when they are found, on examination and testing, to be satisfactory to the Authority, to be not less than four inches (4") in diameter and to meet all requirements of these Regulations and only with a written permit from the Authority. The location of the existing connection shall be shown on an as-built copy of the Site Plan.

### **2.1.2 SEWER CONNECTION PERMIT: ABANDONMENT OF SEPTIC TANKS**

Immediately after connecting any building to the municipal sewer system and after approval to discharge to the system, the owner shall abandon any existing septic tank, or other hollow leaching structure, in such a manner as to eliminate the danger of collapse or entry into such septic tank or leaching structure. Prior to abandonment, the septic tank or leaching structure shall be pumped of all septic wastes. The accepted methods of abandonment shall be to crush such tank or structure and backfill with clean soil or to fill the tank or structure with medium to coarse sand. In addition, the Applicant shall comply with all requirements imposed by the Director of Health with respect to the abandonment of such septic tank.

### **2.1.3 SEWER CONNECTION PERMIT: CONSTRUCTION DETAILS**

The construction of each building sewer, including required pump stations and grease traps, and the methods to be used in excavation, placing of the pipe, jointing, testing and backfilling of the trench sewer to the public sewer shall conform to the Technical Standards contained in these requirements of the building and plumbing code of the Town of Brookfield. In the absence of regulatory or code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the Water Pollution Control Facility Manual of Practice No. FD-5 and the New England Interstate Environmental Training Center (NEIETC) Guides for the Design of Wastewater Treatment Works TR-16 shall apply.

The Applicant shall notify the Authority when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the Authority or its authorized agent. Special fittings may be used for the connection of the building sewer to the public sewer only when approved by the Authority or its authorized agent.

No discharge into the public sewer shall be made until such time as the building sewer and connection have been inspected and approved by the Authority and until a Sewer Discharge Permit has been issued.

### **2.1.4 SEWER CONNECTION PERMIT: FOG INTERCEPTORS AND FOG MANAGEMENT EQUIPMENT**

FOG Interceptors (also known as grease traps) shall be provided when, in the opinion of the Authority, they are necessary for the proper handling of liquid wastes containing fats, oil or grease in excessive amounts, provided however, that such interceptors shall not be required for



private living quarters or dwelling units. All newly constructed commercial or industrial buildings connected to the municipal sewer system after July 1, 1995 shall be served by an external FOG Interceptor (grease trap) conforming to the requirements set forth in the Technical Standards, Section A-1.4. The design for such FOG Interceptor shall be submitted as part of the application for Sewer Connection Permit for such new commercial or industrial building. Upon installation of such system in accordance with the approved design, the FOG Interceptor shall be operated and maintained by the property owner in strict conformance with requirements set forth in the Technical Standards.

All commercial or industrial buildings that existed prior to July 1, 1995 that house Food Preparation Establishments as defined in these Regulations, including all Class III and Class IV food service establishments as defined under Section 19-13-B42 of the State of Connecticut Public Health Code and including all restaurants, hotel, hospital, school and church kitchens, fast food take-out, cafeterias, catering establishments, bars and clubs, shall be served by a FOG Interceptor (grease trap) or alternate FOG Management Equipment conforming to the requirements set forth in the Technical Standards as approved by the Authority. Within six (6) months of issuance by the Authority of a notice to submit an application for approval of FOG Interceptor or FOG Management Equipment, the property owner shall submit a complete application for permission to install an external FOG Interceptor, or where that is not feasible, for permission to install internal FOG Management Equipment. The property owner shall promptly revise or alter such application, including the proposed design for the FOG Interceptor or the design and equipment for the proposed FOG Management Equipment, as deemed necessary by the Authority or its engineer. Within twelve (12) months of approval of such application, the property owner shall complete the installation of the external FOG Interceptor or internal FOG Management Equipment as approved by the Authority. Failure to submit, revise or pursue such application to an approval or failure to complete the installation of approved facilities shall be grounds for termination of sewer service to the property. Upon installation of such system in accordance with the approved design, the FOG Interceptor or the Fog Management Equipment shall be operated and maintained by the property owner in strict conformance with the Technical Standards set forth in these Regulations.

### **2.1.5 SEWER CONNECTION PERMIT: OIL AND SAND INTERCEPTORS**

Special oil and sand interceptors shall be provided for non-domestic waste when such interceptors are, in the opinion of the Authority, necessary for the proper handling of liquid wastes containing oil, grease, any flammable waste, sand or any other harmful waste. Service stations, motor vehicle repair or maintenance facilities, motor vehicle fluid change facilities, auto dealers, car wash facilities and other similar facilities discharging non-domestic waste to the public sewer shall be required to install oil and sand interceptors. When the proposed discharge requires issuance of a Department of Environmental Protection discharge permit, a copy of such permit shall be submitted as part of the Application for a Sewer Connection Permit.

All oil and sand interceptors shall be of a type and capacity approved by the Authority or its designated agent and shall conform to the requirements set forth in the Technical Standards, Section A-1.6.

### **2.1.6 SEWER CONNECTION PERMIT: SPECIAL DISCHARGE FACILITIES**

The Authority may require the installation of pre-treatment facilities a) to reduce biochemical oxygen demand (BOD) of discharged waste to three hundred (300) milligrams per liter; b) to reduce the suspended solids of discharged waste to three hundred-fifty (350) milligrams per liter; or c) to reduce other objectionable characteristics or constituents to within the maximum limits provided in Section 6.0 and Section 6.1 of these Regulations. The Authority may also require the installation of flow-equalizing or "off peak discharge" facilities to control the quantities and rates of discharge of sewage to the public sewer system.

Plans, specifications and all other pertinent information relating to such facilities shall be submitted to the Authority for approval. No Sewer Connection Permit shall be issued until the Authority has approved in writing the plans and specifications for such facilities.

All pre-treatment, flow equalization or "off peak discharge" facilities installed as part of a sewer connection shall be continuously maintained by the owner, and at his expense, in satisfactory and effective operating condition.

For buildings discharging industrial waste to the municipal sewer, the Authority may require the installation of a suitable structure, meters and other appurtenances to facilitate observation, sampling, and measurement of the waste volume and characteristics. Any such required structure shall be safely accessible for Authority inspection and shall be constructed in accordance with plans and specifications approved by the Authority. Each sampling structure

shall be located at a point in the waste stream where a representative sample of the industrial wastewater may be obtained prior to its being diluted by domestic sewage in the building sewer. Each such structure shall be installed and properly maintained at all times by the owner at his expense.

### **2.1.7 SEWER CONNECTION PERMIT: COST OF CONSTRUCTION**

All costs and expense incidental to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify and hold the Town of Brookfield and the Authority harmless from any loss or damage that may be sustained as a result of the installation by the owner of the building sewer.

### **2.1.8 SEWER CONNECTION PERMIT - ADDITIONAL REQUIREMENTS FOR SYSTEMS OWNED BY PROPERTY OWNER'S ASSOCIATION**

If the building sewer facilities to be constructed serve residential or multi-family uses and are owned and managed, or are to be owned and managed, by a property owners association, including a common interest ownership community, the Applicant shall provide specific evidence demonstrating that the ownership and management of the system shall meet the requirements set forth in Section 5.2.2 - Additional Requirements For Systems Owned by Property Owner's Association and shall provide a Permanent Maintenance Agreement as contemplated by Section 5.6 Permanent Maintenance Agreement notwithstanding that the building sewer facilities do not constitute a "community sewerage system" as defined by Section 7-245(3) of the Connecticut General Statutes. In applications involving small gravity systems only, the Authority may waive the requirements of this Section.

## **3.0 SEWER DISCHARGE PERMIT**

### **3.1.1 APPLICATION FOR DISCHARGE PERMIT**

Upon satisfactory completion and inspection of the building sewer installation, the Applicant shall file a completed Application for Discharge Permit and a Billing Data Sheet with the Authority. Such application shall be signed by the owner of the property and shall otherwise be in such form and contain such information as the Authority requires. A suitable as-built plan of the installation shall be provided to the Authority prior to the issuance of any Sewer Discharge Permit. In addition, the following information, to the extent applicable, shall be provided:

A. For commercial and industrial uses:

1. Type and volume of sewage;
2. Estimated daily peak flow;
3. Estimated daily average flow;
4. Number of separate commercial or industrial units;
5. Type or types of business(es);
6. Such other data as the Authority may require;
7. Applicable DEP permit, if not previously provided.
8. Number of full time and part time employees;
9. Number of separate sanitary facilities;
10. Number of seating capacity;
11. Number of public toilet facilities;
12. Number of sinks;
13. Number of public urinals;
14. Number of business hours;
15. Number of washing machines;
16. Number of dishwashers;
17. Number of hospital beds;
18. Number of car wash bays.

B. For residential or multifamily uses:

1. Number of units with kitchen and sanitary facilities;
2. Number of units with only sanitary facilities;
3. Number of units with no sanitary facilities;
4. Total number of units with sanitary facilities;
5. Zoning classification of property.

**3.1.2 DISCHARGE PERMIT: RIGHT OF INSPECTION:**

By submission of an application for Sewer Discharge Permit, the Applicant and the Owner agree that the premises may be inspected by the Authority or its duly authorized agent for purposes of verifying the information submitted in the Application for Sewer Discharge Permit.

### **3.2 DISCHARGE PERMIT: PUMPING FACILITIES**

As a condition of each Sewer Discharge Permit involving the installation of sewage pumping facilities, the applicant and property owner shall execute an easement agreement with the Authority granting the Authority the right: a) to enter onto the property served by such facilities, b) to inspect, repair or replace pumping facilities or equipment, c) to charge the property owner for all equipment and labor provided in inspecting, repairing and replacing such pumping facilities or equipment, and d) indemnifying the Authority against all claims for damages or liability for any work done pursuant to such agreement. Such agreement shall be prepared in recordable form and recorded on the Brookfield Land Records at the expense of the owner.

#### **3.2.1 DISCHARGE PERMIT: MAINTENANCE REQUIREMENTS FOR PUMPING FACILITIES**

As a condition of each Sewer Discharge Permit involving the installation of sewage pumping facilities, the applicant and property owner agree as follows:

Maintenance: All pumping facilities shall be maintained in proper working condition by the property owner and as may specially be required by the Authority. At a minimum, the property owner shall provide for the regular cleaning of wet wells to eliminate odors; the protection and cleaning of float switches from grease and debris; the inspection, and if necessary, the repair, of all electrical equipment by a licensed electrician at least once every two years; and the removal and inspection of the pump at least once a year for wear and seal leakage, and the repair thereof as necessary. Within thirty days following the conclusion of each calendar year, the owner shall file a report describing the prior year's pump facilities maintenance in a form acceptable to the Authority.

### **3.3 DISCHARGE PERMIT: FOG INTERCEPTORS, FOG MANAGEMENT EQUIPMENT AND OIL AND SAND INTERCEPTORS**

As a condition of each Sewer Discharge Permit involving the installation of a FOG Interceptor (grease trap), FOG Management Equipment or an Oil and Sand Interceptor, the applicant and property owner agree as follows:

Maintenance: FOG Interceptors, FOG Management Equipment and Oil and Sand Interceptors shall be maintained by the owner, at his expense, in continuously efficient operation at all times.

External FOG Interceptors: The owner shall cause each external FOG Interceptor serving his premises to be pumped and cleaned when 25% of the operating depth of the Interceptor is occupied by grease and settled solids, but not less than once every three months during the third month of each calendar quarter (i.e. March, June, September and December) pursuant to a routine maintenance program and by a licensed septic tank hauler approved by the Authority. The property owner shall ensure that the FOG Interceptor is inspected when pumped to ensure that all fittings and fixtures inside the interceptor are in good condition and functioning properly. During every inspection, the depth of grease inside the tank shall be measured and recorded in the maintenance log together with a notation of any system deficiencies. Such pumping and cleaning schedule may be modified by the Authority for functional Interceptors subject to abnormally light flows and for Interceptors subject to excessively heavy flows commensurate with the nature of such flows. In addition, the owner shall cause an inspection and pumping log, in a form approved by the Authority, to be maintained at the premises served by said FOG Interceptor which log shall be completed by said approved licensed septic hauler to reflect the date and observations of each inspection and the date of each pumping.

Internal FOG Management Equipment (FOG Recovery Units and FOG Pretreatment Systems): The property owner shall cause each internal FOG Recovery Unit or FOG Pretreatment System serving his premises to be cleaned and maintained in accordance with a written Operation and Maintenance Plan approved by the Authority at the time of approval of the use of such Unit or System. The owner shall cause an inspection, cleaning and maintenance log, in a form approved by the Authority, to be maintained at the premises served by such FOG Management Equipment which log shall be completed to reflect the date and observations of each inspection and cleaning of each such equipment.

Renderable FOG shall not be disposed of in any sewer, septic tank or FOG Interceptor. All renderable FOG shall be stored in a separate, covered, leak proof container, stored out of reach of vermin, and for collection and disposal by an approved FOG renderer.

Small quantities of FOG scraped or removed from pots, pans, dishes and utensils shall be directed to the municipal solid waste stream for disposal.

Oil and Sand Interceptors: Oil and Sand Interceptors shall be maintained by the owner, at his expense, in continuously efficient operation at all times. The owner shall cause each such interceptor to be pumped and cleaned once every three months during the third month of each

calendar quarter (i.e. March, June, September and December) pursuant to a routine maintenance program. Such pumping and cleaning schedule may be modified by the Authority for functional oil and sand interceptors subject to abnormally light flows and for oil and sand interceptors subject to excessively heavy flows commensurate with the nature of such flows. In addition, the owner shall cause an inspection and pumping log, in a form approved by the Authority, to be maintained at the premises served by said interceptor which log shall be completed and certified by the contracted hauler to reflect the date and observations of each inspection and the date of each cleaning and pumping.

*Maintenance Logs:* All maintenance logs required under these Regulations for FOG Interceptors, FOG Management Equipment and Oil and Sand Interceptors shall be maintained on the premises for not less than three years and shall be available for examination by the Authority and the Department of Environmental Protection, their agents, servants and employees at all times during normal business hours of said premises.

### **3.4 REVOCATION OF SEWER DISCHARGE PERMIT**

Each Sewer Discharge Permit shall be revocable by the Authority, following notice to the property owner and a right to be heard, for non-payment of applicable fees, assessments or charges; for failure to comply with the conditions of such Sewer Discharge Permit; for failure to comply with the provisions of the Sewer Use Regulations; and for lapse or termination of any applicable DEP Discharge Permit issued to the owner. Upon revocation of a Sewer Discharge Permit, the Authority may take such steps as are necessary to discontinue and terminate sewer service.

## **4.0 EXPANSION PERMIT: EXPANSION OF SEWAGE COLLECTION SYSTEM BY OWNER (INCLUDING RESIDENTIAL, COMMERCIAL AND INDUSTRIAL SUBDIVISIONS)**

### **4.1 GENERAL**

Any person desiring to connect property to the sewerage system where the sewage collection system does not serve such property, or where the existing sewage collection system requires upgrading, shall apply to the Authority for an Expansion Permit pursuant to the procedures specified in these Regulations.

## **4.2 PRELIMINARY APPLICATION**

Prior to the submission of an application for an Expansion Permit, any person desiring to expand the sewage collection system shall file, in quadruplicate, a Preliminary Letter Application with the Authority. Such Preliminary Letter Application shall be submitted not less than ten (10) days prior to a regular meeting of the Authority. The Preliminary Letter Application shall describe the purpose and nature of the proposed expansion, shall include a sketch or drawing depicting the layout of the proposed expanded sewage collection facilities, and shall address (1) whether the proposed expansion is consistent with a preliminary or detailed design which has been previously approved by the Authority; (2) the basis for the design requirements of any such proposed expansion; (3) whether the proposed expansion is consistent with the Brookfield Plan of Development; and (4) whether the proposed expansion will serve property identified in Section 1.2 of these Regulations for which sewage treatment capacity has been reserved or allocated.

Prior to considering the merits of the proposed sewer expansion, the Authority shall refer a copy of the Preliminary Letter Application and related materials to the Board of Selectmen for its consideration and recommendation pursuant to Section 71-6 of the Code of Ordinances. The Authority shall take no further action on the proposed sewer expansion until twenty-five (25) days have elapsed after referral to the Board of Selectmen.

A Preliminary Letter Application must be reviewed and approved by a majority of the full Authority at a regular meeting following submission to the Board of Selectmen. As part of its process, the Authority may give consideration to the recommendation, if any, received from the Board of Selectmen. In addition, the Authority may submit the proposed sewerage system expansion to the Planning Commission for its consideration pursuant to Section 8-24 of the General Statutes, and may consider the nature of the Planning Commission's statutory report to the Authority. If the Authority approves the Preliminary Letter Application, the person proposing the sewerage system expansion shall be authorized to file an Application for Expansion Permit.

## **4.3 APPLICATION**

**4.3.1 APPLICATION FORM AND REQUIREMENTS.** The Application for Expansion Permit shall be made by the owner or other person having an equitable interest in the



property to be benefited thereby, and shall be in such form as the Authority may prescribe. The Application must be accompanied by five (5) complete sets of maps or plans of the proposed work, together with five (5) complete sets of proposed construction specifications conforming, at a minimum, to the construction specifications contained in the Technical Standards, Sections A-2.1 through A-2.3 and, if applicable, Section A-3.0 of these Regulations. Except as may otherwise be authorized by the Authority, said plans or maps shall be drawn using a horizontal scale of 1 in. = 40 ft. and a vertical scale of 1 in. = 4 ft. and shall be prepared in conformance with the requirements of a class A-2 survey; shall be certified by the Applicant's design engineer and shall show:

- a. all proposed sewer lines, trunks, laterals and mains, including any affected portions of the existing sewage collection systems;
- b. all affected public or private roadways, rights of ways and/or private access ways;
- c. all adjoining properties, property boundaries, property dimensions, and record owners thereof;
- d. location of all utilities;
- e. location of all existing or planned lots and structures;
- f. location and dimensions of all proposed easements. Sewer easements shall be not less than twenty-five (25') in width; the BWPCA may approve reduced or increased width on a case-by-case basis for unique circumstances.
- g. the General Notes as specified in Technical Standards, Section A-2.1; and
- h. the "Standard Details" as specified in Technical Standards, Section A-2.2;

The Applicant shall provide information concerning the design criteria for the proposed sewerage facilities, including estimated average daily and peak flows, the number and type of dwellings and/or buildings contemplated for construction and the existing and proposed use of the property to be served by the proposed expansion or improvement of the sewage collection system. The Applicant shall also provide information concerning the design criteria for any proposed pump station. The Applicant shall provide the Authority with written permission for the Authority members, its employees and agents to enter upon the subject property at all reasonable times to inspect the site before, during and after construction. The Authority may require additional information as it deems necessary.

The application shall be accompanied by an application fee established by the Authority to meet the Authority's estimated expense for administration and for engineering and legal review and analysis and for inspection during construction. *The minimum of such fee shall be \$3,500.00.*

**4.3.2 PERMIT APPLICATION SUBMITTAL.** In order for the Authority to consider any application at a regularly scheduled meeting, the application must be submitted to the Authority at least ten (10) days prior that meeting.

**4.3.3 WAIVER.** The Authority may, upon a showing of undue hardship by the Applicant, waive any application requirement.

**4.3.4 APPROVAL.** The Authority shall not consider an incomplete application. Before the Authority approves an application, the Authority shall find that the proposed work (1) is consistent with the Authority's water pollution control plan, if any; (2) conforms to the design, specification, easement and contract requirements of the Authority; (3) has been approved pursuant to Section 8-24 of the General Statutes; (4) is to be performed by a contractor approved by the Authority; (5) is subject to inspection during construction by the Authority; and (6) if work is to be performed within public rights of way or upon public property, the work shall be secured by performance and payment bonds in the form and with surety approved by the Authority Attorney in amounts equal to one hundred percent (100%) of the contract price for such work. In addition, the Applicant shall provide (where applicable) approval of sewerage facilities by the State Department of Environmental Protection, approval of the submitted project by other land use agencies of the Town, and/or approval by the State Department of Transportation.

The Applicant shall provide the Authority with all necessary easements in a form satisfactory to the Authority Attorney before commencing such work and with complete "As-Built" plans and elevations within 30 days following the completion of such work. The Authority shall closely monitor the construction. As a condition of approval, the Applicant shall be required, within thirty (30) days of billing, to reimburse the Authority for all estimated or actual expense incurred or to be incurred by the Authority in the administration of the project and for engineering and legal review, document preparation, analysis and inspections. The application fee required by Section 4.3.1 may be applied by the Authority against such expense.

**4.3.5 BOND.** Prior to final acceptance of such sewage collection system, the Applicant shall file with the Authority a cash bond, surety bond with surety and in a form acceptable to the Authority or letter of credit drawn by a Connecticut banking institution acceptable to the Authority in the amount of ten percent (10%) of the value of the work accepted. The term of such security shall be one (1) year from the date of final acceptance for sewer lines and manholes and three (3) years from the date of final acceptance for other structures and for all electrical, mechanical and pumping equipment. Such security shall be held to assure proper maintenance of such sewage collection system. During such maintenance period, the Applicant shall, when notified by the Authority or its agent, promptly, and at such Applicant's expense, repair all defects and failures in the construction or operation of such sewage collection system occurring during such maintenance period. Should the Applicant fail to cure and repair such defect or failure, the Authority, upon written notice to said Applicant and to the surety, if any, may cause the required repairs or replacements to be made and recover the cost of same from said maintenance security.

**4.3.6 SEWER CONNECTION AND DISCHARGE PERMITS AND CONNECTION FEE.**

No Sewer Discharge Permit shall be issued for any building to be served by such expansion or improvement of the sewerage collection facility until the Authority has accepted such sewerage collection facility into the municipal sewerage system. In addition, notwithstanding the expansion or improvement of the sewage collection system pursuant to Section 4.3 hereof, all applicable fees for each building to be served by the municipal sewer system shall be paid by the Applicant at the time that application is made for a Sewer Connection Permit for such building. Such fees shall be in an amount and shall be payable on the same terms and conditions as prevailing for new sewer users as prescribed under Section 7.0 et seq. of these Regulations.

**4.3.7 REIMBURSEMENT AGREEMENT.** The Authority may enter into a reimbursement agreement with any person expanding, or constructing improvements to the municipal sewage collection system. Such agreement shall provide, for a period not to exceed ten (10) years, for the reimbursement of a reasonable part of the expense incurred in expanding or improving such collection system from other persons connecting to such expanded or improved collection system. In determining whether to enter into a reimbursement agreement,

the Authority shall consider whether the total estimated cost to connect to the sewer system by new users to be affected thereby will be excessive or prohibitive. Before the Authority enters into any such reimbursement agreement, the terms of such agreement shall be reviewed and approved by the Authority Attorney.

## **5.0 COMMUNITY SEWERAGE SYSTEM**

**5.1 APPROVAL OF PLAN** Any person required or desiring to construct, enlarge, modify, or install a community sewerage system as defined in Section 7-245 of the General Statutes, or any part thereof, shall, before such construction, enlargement, modification or installation, apply to the Authority for approval of the design and layout of such community sewerage system and for permission to construct said system. No community sewerage system involving a subsurface septic system or leaching system shall be approved by the Authority. provided however, that existing sewerage systems involving a subsurface septic system or leaching system may be repaired or improved, subject to execution by the person or property owner responsible for such repair or improvement of a permanent maintenance agreement as contemplated by Section 5.6 of these Regulations.

## **5.2 APPLICATION FORM AND REQUIREMENTS**

### **5.2.1 GENERAL REQUIREMENTS**

The application shall be of such form and type as the Authority may prescribe. The application shall be accompanied by a copy of the permit to discharge issued by the Department of Environmental Protection pursuant to Section 22a-430 of the General Statutes. The application shall also include a complete set and five (5) copies of maps or plans depicting the proposed work prepared and sealed by a professional engineer licensed by the State of Connecticut showing:

- a. all proposed sewer lines, trunks, laterals, connections and mains, pump station and sewage treatment facilities including any affected portions of the existing municipal sewage collection system;
- b. all affected public or private roadways, rights of ways and private access ways;
- c. property boundaries and dimensions and names of adjacent property owners;
- d. location of all existing or planned utilities;
- e. location of all existing or planned structures;

- f. location and dimensions of all proposed easements. Sewer easements shall be not less than twenty-five feet (25') in width; the BWPCA may approve reduced or increased width on a case-by-case basis for unique circumstances.
- g. the "General Notes" as specified in Technical Standards Section A-2.1
- h. the "Standard Details" as specified in Technical Standards Section A-2.2.; and
- i. If the Applicant proposes that the community sewerage system be owned and managed by a property owners association, including a common interest ownership community, and if the Applicant wishes to be excused from the requirements of funding a permanent cash escrow with the Authority to insure proper management, maintenance and repair of such system, the Applicant shall provide the additional information required by Section 5.2.2.

The Applicant shall provide information on the number and type of dwellings and/or buildings contemplated for construction and the existing and proposed use of the property to be served by the proposed community sewage system. The Applicant shall provide information concerning the design criteria for any proposed pump station. The Applicant shall provide the Authority with permission for the Authority members, employees and agents to enter upon the subject property at all reasonable times to inspect the site before, during and after construction. The Authority may require such additional information as it deems necessary.

The application shall be accompanied by an application fee established by the Authority to meet the Authority's estimated expense for administration and for engineering and legal review and analysis. The minimum of such fee shall be \$3,500.00.

### **5.2.2 ADDITIONAL REQUIREMENTS FOR SYSTEMS OWNED BY PROPERTY OWNER'S ASSOCIATION**

If the Applicant proposes pursuant to Section 5.2.1 that the community sewerage system be owned and managed by a property owners association, including a common interest ownership community, the applicant shall provide specific evidence demonstrating that the ownership and management of the system shall meet the following requirements.

- a. The owners of all properties to be served by the community sewerage system shall be members of a property owners' association which is organized and operated as a non-stock corporation in accordance with the provisions of Section 33-1000 et seq. of the Connecticut General Statutes and which shall exist as long as any property is served by the system;
- b. The association shall have the authority and the responsibility to operate, maintain, repair and improve the system in accordance with all applicable requirements, and in a manner which will prevent pollution of the waters of the

state. Such association shall have the power to borrow money to finance such activities, and to defray the cost of such activities by levying assessments against the properties served by the system. Unpaid assessment shall constitute a lien upon the property against which such assessment was levied. Each such lien may be continued, recorded and released in the manner provided by the General Statutes for continuing, recording and releasing property tax liens, and such lien may be foreclosed in the same manner as a lien for property taxes;

c. All of the properties to be served by the community sewerage system, and all other land upon which is located any part of the system, shall be owned in fee or shall be subject to a system of perpetual easements, held by the association or by the members thereof. Such title or easements shall be sufficient to allow such properties to be served by the system and to allow the association to operate, maintain, repair and improve the system as required under Section 5.2.2(b) of these Regulations;

d) The applicant shall demonstrate that such association shall assure the availability of funds that are of actuarial adequacy for the continued operation, maintenance, repair and improvement of the system without pollution of the waters of the state;

e) prior to any discharge to the system, the following requirements shall be met:

(1) The association shall be created and a document or documents establishing its duties and powers as provided in this section shall be filed on the land records and evidence thereof provided to the Authority. Such documentation shall specifically require that the association assure the availability of funds that are of actuarial adequacy as described in Section 5.6 for the continued operation, maintenance, repair and improvement of the system without pollution of the waters of the state;

(2) the system shall be owned by the association as provided in this section and rights of any and all mortgagees or similar interest in the system shall be subordinated to the ownership of association. Evidence satisfactory to the Authority that all mortgages and liens have been so subordinated shall be provided to the Authority;

(3) the association shall obtain a permit to discharge as provided by Conn. Gen. Stat., Section 22a-430, and

(4) the association shall certify to the Authority and the Building Official that a permit to discharge has been obtained.

### **5.3 PERMIT APPLICATION SUBMITTAL**

In order for the Authority to consider any application at a regularly scheduled meeting, the application and all required material must be submitted to the Authority at least ten (10) days prior to that meeting.

#### **5.4 WAIVER**

The Authority may, upon a showing of undue hardship by the Applicant, waive any application requirement.

#### **5.5 APPROVAL OF COMMUNITY SEWERAGE SYSTEM**

The Authority shall not consider an incomplete application. Before the Authority approves an application, the Authority shall find that the proposed work: (1) will serve property identified in Section 1.2 of these Regulations for which sewage treatment capacity has been reserved or allocated; (2) satisfies the requirements of Section 7-246f of the General Statutes and Section 5.5.2 of these Regulations if such system is to be owned and managed by a property owners association; (3) is consistent with the Authority's water pollution control plan, if any; (4) conforms to the design, easement and contract requirements of the Authority; (5) is approved by the Planning Commission, Zoning Commission and Inland Wetlands Commission as to compliance with the applicable planning, zoning and wetlands regulations; (6) is to be performed by a contractor approved by the Authority; (7) is subject to inspection during construction by the Authority; (8) is secured by a Permanent Maintenance Agreement as specified in Section 5.6 of these Regulations; and (9) conforms to such other requirements established by the Authority to preserve the public health and safety and to preserve water quality.

#### **5.6 PERMANENT MAINTENANCE AGREEMENT:**

Prior to approval of a community sewerage system, the Applicant shall provide a fully executed Permanent Management, Maintenance and Escrow Agreement acceptable to the Authority ensuring the prompt and proper management, maintenance, repair and replacement of such community sewerage system. Such Agreement shall provide for a cash depreciation escrow account of actuarial adequacy as hereafter provided to be established with the Authority, or if the system is to be owned by a property owner's association pursuant to Section 5.2.2 of these Regulations, with the Association, to fund 100% of the replacement cost of such community sewerage system. Such cash depreciation escrow account shall be funded with an initial cash deposit in an amount to be established by the Authority which amount shall be not less than ten percent (10%) of the estimated installed cost of all mechanical, electrical and pump equipment plus not less than

two percent (2%) of the estimated installed cost of all other system components<sup>3</sup>; and shall be further funded in an amount equal to one hundred percent (100%) of the replacement cost of such system, as adjusted as deemed appropriate by the Authority, for changes in the cost of equipment, materials and construction, within the time or times specified by the Authority but within not more than one hundred (100) years for sewer pipe, manholes, wet wells, valve chambers and clean outs, within not more than fifteen (15) years for pumps, electrical and mechanical equipment, and within not more than fifty (50) years for force mains, and other incidental types of non-mechanical equipment. Funding of the full replacement value shall be accomplished through annual budgeting by the property owners or the property owner's association until the full replacement value of each component has been accomplished. The existence of such cash depreciation escrow serves to protect the Town of Brookfield and shall not relieve the Applicant or its successors of separately funding operating, maintenance and depreciation expense of such community sewerage system. For any Permanent Maintenance Agreement involving a community sewerage system in which the cash depreciation escrow account is held by a property owner's association, the Agreement shall require annual accounting of funds deposited into such escrow and of the amount on hand, shall prohibit any expenditure of funds held in escrow in excess of \$5,000 in any calendar year without Authority approval, and shall provide the Authority with all of the rights and remedies specified in Section 7-246f(b) of the Connecticut General Statutes.

At the expense of the Applicant, the Authority shall record the Permanent Management, Maintenance and Escrow Agreement on the land records of the Town of Brookfield for the purposes of informing existing or future property owners of liability for future management, maintenance and depreciation escrow expense.

The Applicant shall provide the Authority with copies of all proposed manufacturer equipment warranties, contractor warranties and necessary easements in a form satisfactory to

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<sup>3</sup> The Authority, by resolution duly adopted and amended from time to time, may establish a schedule of estimated costs of system components to be utilized by the Authority in evaluating and establishing the estimated installed cost of community sewerage systems. When established, and as thereafter amended from time to time, such schedule shall be included as an appendix to these Regulations.



the Authority Attorney before commencing any work on the community sewerage system. The Applicant shall provide the Authority with complete "As-Built" plans and elevations of the system within thirty (30) days following the completion of such work and if the system is to be owned and managed by a property owner's association in accordance with Section 5.2.2 of these Regulations, all documents evidencing satisfaction of the requirements of Section 5.2.2 In addition, as a condition of approval, the Applicant, within thirty (30) days of billing, shall be required to reimburse the Authority for all expenses incurred by the Authority in the administration of the project and for engineering and legal review, document preparation, analysis and inspections.

## **6.0 SEWER DISCHARGE CRITERIA**

No person shall discharge or cause to be discharged to any sanitary sewer any unpolluted waters such as storm water, groundwater, roof runoff or subsurface drainage. No person shall connect any roof down spout, foundation drain, area way drain or any other source of surface water runoff or groundwater to a building sewer or to a building drain which, in turn, is connected directly or indirectly to a public sewer.

No person shall discharge or cause to be discharged to the Town sewer system any sewage, wastewater or pollutant which will interfere with the operation or performance of the sewage treatment plant.

No person shall discharge or cause to be discharged to the Town sewer system any "septage" as defined in Section 10.0 (mm).

No person shall discharge or cause to be discharged to the Town sewer system any of the following described waters or waste:

- (a) Any gasoline, benzene, naphtha, fuel oil or other inflammable or explosive liquid, solid or gas. The lower explosive limit reading on an explosion hazard meter, at the point of discharge into the sewer system or at any point in the system shall not exceed five percent (5%) for any two successive readings nor ten percent (10%) for any single reading;
- (b) Any solid, fibrous or viscous substance which is capable of causing an obstruction to the flow in the sewers or other interference with the proper operation of the sewerage system, including, but not limited to wet wipes, baby wipes, adult wipes, cosmetic wipes, paper towels, disposable diapers, cloth diapers, feminine hygiene products, cotton swabs, Q-tips, bandages, sanitary towels, incontinence pads, underwear, panty hose, plastic bags, disposable gloves, dog waste bags (and including all such items whether designated "disposable", "flushable" or otherwise), grease, garbage with

particles greater than one-half inch (1/2") in any dimension, animal guts or tissues, paunch, manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud or glass grinding or polishing wastes;

- (c) Any waters or wastes having a pH lower than five and five-tenths (5.5) or higher than nine (9) or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewerage works;
- (d) Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals or create a hazard in the sewerage facilities or the receiving waters of the sewage treatment plant;
- (e) Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant, or which cause the effluent limitations of the NPDES permit to be exceeded;
- (f) Objectionable poisons, cyanides, or any substance likely to generate poisonous fumes that may interfere with, constitute a hazard to, or be dangerous to human beings or animals or prevent entry into the public sewer for purposes of maintenance and repair;
- (g) Any sewage which exceeds the limitations set forth in an applicable "Categorical Pretreatment Standard"; or
- (h) Any wastes deemed unacceptable by the City of Danbury.

Except as approved by the Authority, no person shall discharge or cause to be discharged to the Town sewer system any of the following described waters or wastes:

- (a) Any liquid or vapor having a temperature higher than one hundred fifty degrees (150) Fahrenheit;
- (b) Any waters or wastes which may contain more than one hundred (100) milligrams per liter of fat, wax, petroleum, oil or grease; or which may contain more than twenty (20) milligrams per liter of floatable oil; or which may contain substances which may solidify or become viscous at temperatures between thirty-two (32) and one hundred fifty degrees (150) Fahrenheit;
- (c) Any garbage that has not been properly shredded to particle size of not greater than one-half inch (1/2") in any dimension;
- (d) Any sewage or waste containing odor producing substances which exceed limits established by the Department of Environmental Protection;

- (e) Any radioactive wastes or isotopes, or concentrations thereof, which exceed limits established by the Department of Environmental Protection;
- (f) Any discharge of phosphates which will interfere with the operation or performance of the treatment plant; or
- (g) Any wastes or material which exerts or causes;
  - 1) Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions);
  - 2) Unusual concentrations of inert suspended solids (such as, but not limited to sodium chloride and sodium sulfate);
  - 3) Unusual biochemical oxygen demand (BOD), chemical oxygen demand or chlorine demand and thereby constituting a significant load on the sewage treatment plant;
  - 4) Unusual volume of flow or concentrations of wastes constituting a "slug" as defined in Section 10.0(tt);
  - 5) Overflow from holding tanks or other receptacles storing organic wastes; or
  - 6) Sewage with a concentration of pollutants in excess of the following limits (note: All metals are to be measured as total metals):

<u>Pollutant</u>	<u>Concentration: mg/l</u>
Arsenic	0.05
Barium	5.0
Boron	5.0
Cyanides	0.1
Fluoride	5.0
Chromium (total)	1.0
Chromium (Cr +6)	0.1
Magnesium	100.0
Manganese	5.0
Copper	1.0
Zinc	1.0
Cadmium	0.1
Lead	0.1
Tin	2.0
Silver	0.1
Mercury	0.01
Nickel	1.0

There shall be no admission into the public sewer system of the following sewage, waters or wastes, without review and prior approval by the Authority:

- (a) having a five day biochemical oxygen demand (BOD) greater than three hundred (300) milligrams per liter; or
- (b) containing more than three hundred-fifty (350) milligrams per liter of suspended solids; or
- (c) containing any quantity of substances having the characteristics described herein (Section 6.0); or
- (d) having an average daily flow greater than one thousand gallons (1000); or
- (e) from any flow-equalizing or "off peak discharge" facility.

## **6.1 SPECIAL DISCHARGE CRITERIA**

All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in these regulations, shall be made and determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association. Sampling methods, locations, times, duration, and frequencies may be determined by the Authority for individual users of the system. All costs incurred by the Authority in connection with such measurement tests and analyses shall be reimbursed to the Authority by the property owner; and if not sooner paid, may be added to and collected in the same manner as such property owner's sewer use charges.

No person shall dilute, by process water or otherwise, a discharge to the sewage system as a partial or complete substitute for adequate pretreatment to achieve compliance with specific pollutant limitations which may be established or imposed by the Authority.

## **7.0 USE, CONNECTION AND OTHER CHARGES**

**7.1.1 USE CHARGES.** Sewer Use Charges shall be established for each fiscal year to recover, on a proportional basis from each property owner, the costs anticipated by the Authority for the operation, rehabilitation and maintenance of the sanitary sewer system. The Use Charges shall generate sufficient revenue to offset the cost of all treatment, operation, rehabilitation and maintenance provided by the Authority. Operating budget deficits, if any, will be recouped in subsequent fiscal years.

Use Charges shall be based upon "unit" fees established by the Authority following public hearing as required by Section 7-255 of the General Statutes. Every property owner having a structure connected to the Brookfield sewerage system shall pay a Use Charge for each

such structure based upon the number of "units" specified in these Regulations. The Authority may prescribe a minimum annual or quarterly Use Charge for any class of user.

### **7.1.2 DANBURY PLANT CHARGE.**

Effective as of June 1, 2017, a Danbury Plant Charge (New) shall be established to pay the estimated annual assessment to Brookfield from the City of Danbury for design, engineering and ultimately for construction of proposed Danbury treatment plant upgrades and improvements intended to meet mandated Federal and State regulatory requirements. The charge will be assessed against each property located within a sewer service area established by the Authority whether or not the property is connected to the sewer system. The charge shall be established by the Authority following public hearing as required by Section 7-255 of the General Statutes.

The charge shall be based upon "unit" fees. For improved properties, whether or not connected to the sewer system, the Danbury Plant Charge shall be based upon the number of "units" used for determining the Sewer Use Charge. If the property is unimproved vacant land, the Danbury Plant Charge will be based on 1.0 unit per acre of land or part thereof, with a minimum charge of one (1.0) unit.

### **7.1.3 DETERMINATION OF USE CHARGES - BILLING DATES**

Effective December 1, 2013, Use Charges shall be assessed as of the first day of December and June of each year upon the record owner of property. Such charges shall be billed in arrears and payable in advance for the next succeeding January 1 through June 30 in the case of the December assessment and for the next succeeding July 1 through December 31 in the case of the June assessment. Use Charges shall be delinquent as of the first day of the month next succeeding the assessment/billing date.

If the property is not connected to the sewer system for the previous entire billing period, the Use Charge shall be prorated on a daily basis for the actual number of days the property was connected for that billing period. If the property (or an individual billed unit thereof) becomes vacant during the previous billing period, then the "unit" fees applicable to that property (or its individual billed unit thereof) shall be reduced from its current usage charge to a charge based on one "unit".

In assessing Use Charges, one “unit” shall be deemed to have a discharge of 125 gallons per day and units shall be determined as follows:

<u>Service Type</u>	<u>Number of Unit Charges</u>
1. Single Family Dwelling .....	1.0
2. Multi-Family Dwelling (e.g., apartment complex, duplex, condominium complex, rooming or boarding house, hotel, motel, trailer park, school dormitory)	
a) For each single family housekeeping unit with kitchen and sanitary facilities .....	1.0
b) For each room not included in (a) with sanitary facilities .....	0.5
c) For each room not included in (a) without sanitary facilities .....	0.25
3. Commercial establishments (e.g. stores, offices, shopping centers):	
a) Up to four (4) persons working or employed therein .....	1.0
b) For each additional person over four (4) working or employed therein ....	0.25
c) For each office with separate sanitary facilities (to be separately considered from office under 3a and 3 b above) .....	1.0
d) For each store with public sanitary facilities (to be considered in addition to 3a and 3b above):	
per public toilet fixture .....	1.0
per public urinal .....	0.5
per public sink .....	0.25
e) For each store or supermarket with fixtures for meat or fish preparation (to be considered in addition to 3a and 3b above) .....	1.25
4. Trailer parks, for each trailer stall .....	1.0
5. Schools (See Note B)	
a) Per 100 students and personnel or fraction thereof .....	3.5
b) Additional for showers per 100 students and personnel .....	1.5
c) Additional for cafeterias with kitchen facilities per 100 students and personnel .....	1.5
6. Churches, public buildings (other than schools), libraries, post offices, fire houses .....	1.0
7. Service station and/or garage (without automatic or semi-automatic car washing facilities .....	2.0

8.	Theaters, for each 100 person capacity or fraction thereof .....	1.5
9.	Restaurants, luncheonettes, diners, catering establishments and social or commercial dining facilities (without separate bar) per 10 seats	
	a) For up to an 8-hour daily period .....	2.0
	b) For each additional hour .....	.1
10.	Laundromats, per 3 clothes washing machines (See Note D) .....	1.5
11.	Hospitals, per 10 beds (See Note D) .....	5.5
12.	Car washing facilities, per bay .....	3.0
13.	Taverns, or separate bar in restaurant, for 8 hour daily period .....	3.0
14.	Industrial Establishments	
	a) Up to four (4) persons working or employed therein .....	1.0
	b) Additional for each person over four working or employed therein, per person .....	0.25
	c) Additional for domestically equivalent process wastes per 100,000 gallons annually or part thereof, discharged to public sanitary sewers (See Note D & E) .....	0.25
	d) Additional for strong process wastes .....	See Note F
15.	Physical fitness or sports training facilities, gyms and clubs:	
	a) Up to four (4) persons working or employed therein (See Note A) .....	1.0
	b) For each additional person over four (4) working or employed therein ....	0.25
	c) Per 100 patrons (daily average) or fraction thereof (See Note I) .....	3.5
	d) Additional for showers per 100 patrons (daily average) or fraction thereof	1.5
	e) Addition per 3 clothes washing machines or fraction thereof .....	1.5
	f) Additional for cafeterias with kitchen facilities per 100 patrons (daily average) or fraction thereof .....	1.5
	g) Swimming pool and/or hot tub backwash .....	1.0
16.	Pet Groomers:	
	a) Up to four (4) persons working or employed therein .....	1.0
	b) For each additional person over four (4) working or employed therein ....	0.25
	c) For each grooming station .....	0.75
	d) For each washing machine .....	0.25
17.	Personal Care (Nail Salons, Hair Salons, Wax Salons, Tanning Salons, Spas):	

- a) Up to four (4) persons working or employed therein ..... 1.0
  - b) For each additional person over four (4) working or employed therein .... 0.25
  - c) For each Manicure Chair ..... 0.10
  - d) For each Pedicure Chair ..... 0.25
  - e) For each Waxing Room ..... 0.10
  - f) For each Hair Cutting Chair ..... 0.25
  - g) For each Massage Table/Room ..... 0.10
  - h) For each Tanning Bed/Room ..... 0.10
  - g) For each Unspecified Room ..... 0.10
18. Bowling Alleys
- a) For each Bowling Lane .....0.40
19. Golf Driving Ranges
- a) For each Hitting Bay .....0.20

**NOTES AND SPECIAL CHARGES**

- A. Employees working 20 hours or less per week shall be counted as one-half person for purposes of determining the number of unit charges.
- B. The number of unit charges computed for schools shall be multiplied by 0.50 for schools operating 15 hours or less per week.
- C. If water conservation devices are installed by a commercial user, and their effectiveness is demonstrated to the satisfaction of the Authority, a reduction in charges up to 20% may be granted.
- D. Charges will be separately established for users expected to have an average daily discharge of 25,000 gallons or more per day ("major sewer users"). Any commercial or industrial use having an average daily discharge of 25,000 gallons or more per day may be charged on the basis of one unit per 100,000 gallons discharged annually (or part thereof). Meter facilities for such users shall be installed at the expense of the Owner.
- E. "Domestically equivalent process waste" is one that possesses the following characteristics: 1) BOD of 250 mg/l, or less, and suspended solid concentrations of 250 mg/l or less; and 2) otherwise meets the general standards described in Section 6.0 and Section 6.1 of these Regulations.
- F. "Strong process waste" is any waste that is not "domestically equivalent process waste" as defined in "E" above. Charges for such waste, if accepted by the Authority, will be established on the characteristics, quality and concentration of such wastes compared with that of "domestically equivalent process wastes".



- G. Charges will be separately established by the Authority for uses or types of uses not listed above. The Authority shall separately establish the number of unit charges applicable to such use.
- H. Charges will be separately established by the Authority for users that create special expense to the Authority.
- I. To determine the daily average number of patrons in the absence of specific information, it shall be assumed that each patron uses the facility an average of biweekly, or one-half times per week. Thus if there are 550 registered patrons but only 200 active patrons, the daily average is calculated  $550 \div 2 = 275 \div 7 = 39.2$ .

## **7.2 APPLICATION FEES**

**7.2.1. APPLICABILITY.** Application Fees shall be paid to the Authority at the time that the Sewer Connection Permit application is filed with the Authority pursuant to Section 1 of these Regulations. No person shall uncover, make any connection with or opening into, alter, repair, disturb, use or discharge to any public sewer or appurtenance thereof without first obtaining a written Sewer Connection Permit from the Authority and without first paying to the Authority the applicable Sewer Application Fees and any applicable Sewer Connection Charge.

**7.2.2 APPLICATION FEES CALCULATED.** The Authority may determine, fix and charge Sewer Application Fees based upon criteria including, but not limited to, (1) anticipated or actual costs of processing Sewer Connection Permit and Sewer Discharge Permit applications; (2) inspections; (3) other costs incurred by the Authority incidental to processing applications for Sewer Connection and Discharge Permits; and (4) the cost to be incurred by the Authority to make changes in the existing sewerage system for manhole stubs, wyes, risers, manholes or other items necessary to effect such connection.

The Authority may determine Application Fees on a case-by-case basis. The minimum Application Fee, however, shall be \$400.00 for each commercial or industrial building sewer connection and \$250.00 for each residential building sewer connection.

## **7.3 CAPITAL COST RECOVERY CONNECTION CHARGES**

### **7.3.1 APPLICABILITY.**

Except as hereafter provided, a two percent (2%) Capital Cost Recovery Connection Charge (2% Connection Charge) originally established by the Authority by

Resolution of December 16, 2009 shall be applied in each sewer district following the expiration of that district's benefit assessment installment payment plan program. Such Capital Cost Recovery Connection Charge is currently applicable to properties located in the White Turkey/Candlewood Lake Road Sewer Area, the Southwest Sewer Area, including Commerce Road, the Center School Sewer Area and the Sandy Lane Sewer District (sometimes collectively called Federal Road South Sewer Area). The 2% Connection Charge will be applicable to the Federal Road Sewer Area effective as of the October 1, 2020 Grand List, the Three Condominium Sewer Area effective as of the October 1, 2029 Grand List, the Old New Milford Road / Delmar Drive Sewer Area effective as of the October 1, 2032 Grand List, the High Meadow Sewer District effective as of the October 1, 2033 Grand List and the Rollingwood Sewer District effective as of the October 1, 2026 Grand List. These dates are subject to change should the expiration of the Benefit Assessment installment payment plan program change for a Sewer Area. Additional Sewer Areas, added to the Brookfield system, from time to time, shall also be subject to a 2% Capital Cost recovery Connection Charge at the expiration of that Sewer Area's Benefit Assessment installment payment plan program.

Such Connection Charge shall equal two percent (2%) of the connecting property's assessed value on the most recently completed Grand List of the Town of Brookfield. In accordance with the Authority's customary practice applicable to supplemental Benefit Assessments, such Connection Charge shall be reduced to reflect any Benefit Assessment or Connection Charge previously levied and paid with respect to such property in accordance with the following procedure:

- 1) Split out and determine the land value and the building and improvement value from the Grand List assessment applicable to the original Benefit Assessment and any subsequent supplemental Benefit Assessments.
- 2) Split out and determine the land value and the building value from the current Grand List Assessment.
- 3) Remove the land from the current Grand List Assessment valuation.
- 4) Subtract the original building valuation for assessment purposes from the current building valuation. Items such as parking lots, light poles/fixtures, site drainage, unoccupied storage buildings should be excluded, but attached

appurtenances to occupied buildings should be included. Assessment penalties should be excluded.

5) Assess the Connection Charge at 2% of the resulting amount.

6) In the case of a new building being added to the property, the Connection Charge is applied to the value of the new building only, since the property owner has already paid a Benefit Assessment for the land and the existing building(s).

The Authority's intent is to collect the 2% Connection Charge on the value of the new building improvements, but not to collect for land and improvements for which an Assessment, supplemental Benefit Assessment or connection charge has previously been imposed and paid. As such, no new Connection Charge is collected on the value of the land as that was previously covered with the original assessment. And by netting out the original/supplemental building/improvement value from the current building/improvement value, the property owner is not paying twice for that portion of the new improvements covered by the original Benefit Assessment.

Notwithstanding the foregoing, if construction on any building subject to such 2% Capital Cost Recovery Connection Charge was commenced prior to and completed within two years of the expiration of the applicable district's benefit assessment installment payment plan as evidenced by the issuance within such two year period of a certificate of occupancy by the Town of Brookfield Building Official, the Capital Cost Recovery Connection Charge shall be calculated in the same manner and at the same rate as was applicable to the determination of benefit assessments for the district in which the property is located, provided further however, that such alternate method of calculating the Capital Cost Recovery Connection Charge results in a lower Connection Charge.

The Authority may determine, fix and charge such other capital cost recovery connection charges from time to time as it deems appropriate.

### **7.3.2 DEFERRED PAYMENT OF CAPITAL COST RECOVERY CONNECTION CHARGE**

Any property owner who shall be required to pay a 2% Capital Cost Recovery Connection Charge ("Connection Charge") in excess of Five Thousand Dollars (\$5,000.00), but

less than Fifteen Thousand Dollars (\$15,000.00) may, at the option of such property owner, elect to pay the capital cost recovery connection charge together with interest on the unpaid principal amount at the rate of 9.0% per annum, in accordance with the following installment plan. The first installment shall be in the amount of Two Thousand Dollars (\$2,000.00) and shall be payable at the time that the Capital Cost Recovery Connection Charge is assessed. The balance of the Connection Charge shall be paid in four (4) equal annual installments of principal, together with accrued interest, commencing on December 1 next following issuance of the assessment of the Capital Cost Recovery Connection Charge.

Any property owner who shall be required to pay a 2% Capital Cost Recovery Connection Charge (“Connection Charge”) in excess of Fifteen Thousand Dollars (\$15,000.00) but less than Fifty Thousand Dollars (\$50,000.00) may, at the option of such property owner, elect to pay the capital cost recovery connection charge together with interest on the unpaid principal amount at the rate of 7.0% per annum, in accordance with the following installment plan. The first installment shall be in the amount of Ten Thousand Dollars (\$10,000.00) and shall be payable at the time that the Capital Cost Recovery Connection Charge is assessed. The balance of the Connection Charge shall be paid in four (4) equal annual installments of principal, together with accrued interest, commencing on December 1 next following issuance of the assessment of the Capital Cost Recovery Connection Charge.

Any property owner who shall be required to pay a Capital Cost Recovery Connection Charge (“Connection Charge”) in excess of Fifty Thousand Dollars (\$50,000.00) but less than One Hundred Thousand Dollars (\$100,000.00) may, at the option of such property owner, elect to pay the capital cost recovery connection charge together with interest on the unpaid principal amount at the rate of 7.0% per annum, in accordance with the following installment plan. The first installment shall be in the amount of Fifteen Thousand Dollars (\$15,000.00) and shall be payable at the time that the Capital Cost Recovery Connection Charge is assessed. The balance of the Connection Charge shall be paid in seven (7) equal annual installments of principal, together with accrued interest, commencing on December 1 next following issuance of the assessment of the Capital Cost Recovery Connection Charge.

Any property owner who shall be required to pay a Capital Cost Recovery Connection Charge (“Connection Charge”) in excess of One Hundred Thousand Dollars (\$100,000.00) may,

at the option of such property owner, elect to pay the capital cost recovery connection charge together with interest on the unpaid principal amount at the rate of 7.0% per annum, in accordance with the following installment plan. The first installment shall be in the amount of Twenty-Five Thousand Dollars (\$25,000.00) and shall be payable at the time that the Capital Cost Recovery Connection Charge is assessed. The balance of the Connection Charge shall be paid in nine (9) equal annual installments of principal, together with accrued interest, commencing on December 1 next following issuance of the assessment of the Capital Cost Recovery Connection Charge.

If any installment remains unpaid for thirty (30) days after the same shall become due, the entire unpaid balance of the Capital Cost Recovery Connection Charge, together with all unpaid interest, shall become immediately due and payable. The Authority shall have all rights provided by the Connecticut General Statutes to enforce collection and payment of said unpaid amount, including those rights provided by Section 7-254 of the Connecticut General Statutes, as amended.

Any person electing to defer payment of the 2% Capital Cost Recovery Connection Charge in accordance with this section shall execute such documentation required by the Authority to reflect the liability of the property owner for the payment of the Connection Charge on the land records and shall pay a fee equal to the amount of the Town Clerk's recording fee for such documentation.

### **7.3.3 FAILURE ONLY CAPITAL COST RECOVERY CONNECTION CHARGES**

When a property contains more than one principal use and such uses are housed in more than one principal building, and when fewer than all of principal buildings are connected to the municipal sewer, and when the primary reason for making such connection is to abate or mitigate an existing or threatened pollution problem, including a failed septic system, the capital cost recovery connection charge shall be determined by reference to the total assessed value of the land, the assessed value of the principal building(s) actually connected to the sewer and the assessed value of any structures or other improvements accessory to such principal building(s). If other buildings on that property are subsequently connected to the municipal sewer, additional

capital cost recovery connection charge(s) shall be levied based on the applicable assessed value of the additional building(s) so connected.

In those cases where the primary reason for making such connection is to abate or mitigate an existing or threatened pollution problem, including a failed septic system, and where such connection charge exceeds \$50,000, the Authority, on a case by case basis, may extend the payment period otherwise applicable to such connection charge for a period of up to five (5) additional years.

#### **7.3.4 RECALCULATION OF CAPITAL COST RECOVERY CONNECTION CHARGES**

For all capital cost recovery connection charges for which a deferred payment plan under Section 7.3.2 of the Sewer Use Rules and Regulations is in effect or for which an extended payment plan is in effect under Section 7.3.4 of the Sewer Use Rules and Regulations or under its predecessor, the Resolution of December 16, 2009, the following look back rule shall apply: Not later than May 1st of each year, the Authority shall recalculate the original capital cost recovery connection charge based upon the then current mechanisms and procedures for calculating capital cost recovery connection charges and based upon the then current land and building assessment values. If such recalculation results in a lower calculated capital cost recovery connection charge, the difference between the original connection charge and the recalculated connection charge shall be abated or otherwise credited to the property owner's existing liability in partial or full discharge of the capital cost recovery connection charge liability, and any future billings during the remaining term of the payment plan shall be based upon the then reduced amount.

#### **7.4 DELETED EFFECTIVE 1/23/13**

**7.5 INSPECTION FEE** The Authority shall levy and assess an inspection fee as necessary to recover the Authority's cost of inspections associated with building sewer installations, sewer extensions and community sewerage system installations. The inspection fee shall be based on an hourly rate established by the Authority following public hearing as required by Section 7-255 of the General Statutes.

#### **7.5.1 INSPECTION FEES – PUMP STATIONS AND FOG INTERCEPTORS AND MANAGEMENT EQUIPMENT**

The Authority shall establish an annual inspection fee to defer the Authority's program costs associated with building sewer pump station inspections and with external FOG interceptor and internal FOG management equipment inspections. Such fees shall be paid by the sewer user whether or not an inspection of the user's pump station or FOG interceptor or management equipment actually occurs. Such inspection fee shall be determined following public hearing as required by Section 7-255 of the General Statutes and shall be based on the anticipated costs to the Authority of determining owner compliance with the provisions of Section 3.2.1 and Section A-1.3.1 of these regulations as to pump stations and with the provisions of Section 3.3 and Sections A-1.4 and A-1.5 of these regulations as to FOG interceptors and FOG management equipment. Such inspection fee shall be levied on an annual basis as an addition to the property owner's sewer use charge.

**7.6 CHARGE CONSTITUTES A LIEN** User Charges, Danbury Plant Charges and Capital Cost Recovery Connection Charges, together with interest thereon at the rate of 1-1/2% per month as provided by statute, and all costs and fees incurred in the collection thereof, shall constitute a lien upon the property served by the sewer system and such lien may be foreclosed and such charges collected in the manner provided by the Connecticut General Statutes.

**7.7 ASSESSMENT OF BENEFITS**

**7.7.1 GENERAL.** At any time after the expansion, improvement or construction of the sewerage system or any portion thereof, the Authority may levy benefit assessments upon the lands and buildings which, in its judgment, are especially benefited thereby, whether they abut on such sewerage system or not, and upon the owners of such land and buildings. No property shall be assessed in excess of the benefit accrued or accruing to it.

No assessment shall be made until after a public hearing before the Authority, at which time, the owner of the property to be assessed shall have an opportunity to be heard concerning the proposed assessment. Notice of the time, place and purpose of such hearing shall be published at least ten (10) days before the date thereof in a newspaper having a general circulation in the municipality, and a copy of such notice shall be mailed to the owner of any property to be affected thereby at such owner's address as shown on the last-completed grand list of the Town or at any later address of which the Authority may have knowledge. A copy of the proposed assessment shall be on file in the office of the Town Clerk and available for inspection

by the public for at least ten (10) days before the date of such hearing. When the Authority has determined the amount of the assessment to be levied, it shall file a copy thereof in the office of the Town Clerk and, not later than five (5) days after such filing, shall cause the same to be published in a newspaper having a general circulation in the Town and shall mail a copy of such assessment to the owner of property affected thereby at such owner's address as shown on the last completed grand list of the Town or at any later address of which the Authority may have knowledge. Such publication and mailing shall state the date on which such assessment was filed and that any appeals from such assessment must be taken within twenty-one (21) days after such filing. Any person aggrieved by any assessment may appeal to the Superior Court for the Judicial District of Danbury in accordance with the provisions of Section 7-250 of the Connecticut General Statutes.

Whenever property consisting of vacant land is improved or divided, and whenever improved property is expanded, modified or altered so as to increase its assessed value, its number of assessable units, the use classification of its assessable units or the benefit which it derives from the municipal sewer system, then in any such event, the property shall be subject to the levy of a supplemental benefit assessment. Such supplemental benefit assessment shall reflect the increase in value or the value added to property as a whole as a result of division, new construction and change in number or classification of assessable units. Unless the Authority otherwise adopts an installment method of payment for the payment of supplemental benefit assessments, any such supplemental benefit assessment shall be immediately due and payable in full when levied.

**7.7.2 PAYMENT OF BENEFIT ASSESSMENTS - ACCELERATION.** Benefit Assessments shall be due and payable at such time as fixed by the Authority. The Authority may provide for the payment of benefit assessments in not more than thirty (30) substantially equal annual installments, together with interest, all as provided for in Section 7-253 of the General Statutes; provided, however, that if any installment remains unpaid for thirty (30) days after the same shall become due and payable, then at the option of the Authority, the entire unpaid balance of such benefit assessment, together with all unpaid interest, shall become immediately due and payable.



### **7.7.3 PAYMENT METHOD OPTION FOR ELDERLY PROPERTY**

**OWNERS.** The Authority may permit any property owner eligible for tax relief under the provisions of Sections 12-129b or 12-170a of the Connecticut General Statutes, or under a plan of tax relief adopted by the Town in accord with Section 12-129n, to apply to the Authority for approval of an optional method of payment of such owner's sewer benefit assessments, provided, however, that the Town has first adopted an Ordinance permitting such optional method of payment as provided for in Section 7-253a of the Connecticut General Statutes. Any such optional payment method shall be subject to the provisions of Section 7-253a of the Connecticut General Statutes and to annual review by the Authority.

### **7.7.4 DEFERRED ASSESSMENTS DUE TO ANTICIPATED DEVELOPMENT.**

(a) Pursuant to provisions of Section 7-249 of the Connecticut General Statutes, the assessment of benefits due to the anticipated development of land which is zoned for other than business, commercial or industrial purposes or which is classified as farm land, forest land or open space land pursuant to the provisions of Section 12-107a through 12-107e, inclusive, of the Connecticut General Statutes, or due to the anticipated construction or expansion of buildings or structures, shall be deferred until such anticipated development, construction or expansion is approved or occurs. In the case of property so zoned or classified which exceeds the size of the smallest lot permitted in the lowest density residential zone of the Town by more than one hundred percent (100%), assessment of such excess land shall be deferred until such excess land shall be built upon, or a building permit issued therefore or until the Planning Commission has approved a subdivision plan for such excess property, whichever event shall first occur.

(b) No lien for payment shall be filed on property for which a deferral of assessment is required hereunder, but the Authority shall cause its Collector on its behalf to place a caveat on the land records as to all land for which an assessment of benefits has been deferred hereunder.

**7.7.6 DELINQUENT ASSESSMENTS.** Delinquent assessments shall be secured in the method hereinafter provided:

(a) Any assessment of benefits or any installment thereof, not paid within thirty (30) days after the due date, shall be delinquent and shall be subject to interest from such due date at the interest rate and in the manner provided by the General Statutes for delinquent property taxes. Each addition of interest shall be collectible as a part of such assessment.

(b) Whenever any installment of an assessment becomes delinquent, the interest on such delinquent installment shall be as provided in paragraph (a) or five dollars (\$5.00), whichever is greater. Any unpaid assessment and any interest due thereon shall constitute a lien upon the real estate against which the assessment was levied from the date of such levy. Each such lien may be continued, recorded and released in the manner provided by the General Statutes for continuing, recording and releasing property tax liens. Each such lien shall take precedence over all other liens and encumbrances except taxes and may be foreclosed in the same manner as property tax liens. The Authority's Collector may collect such assessments in accordance with any mandatory provision of the General Statutes for the collection of property taxes, and the Authority may recover any such assessment in a civil action against any person liable therefore.

## **8.0 ORDERS TO CONNECT**

In accordance with the provisions of Section 7-257 of the General Statutes, the Authority may order the owner of any building to which a sewerage system is available to connect such building with the sewer system. No such order shall be issued until after a public hearing with respect thereto after due notice in writing to such property owner.

Whenever an order to connect is issued against a property owner, such owner shall fully comply with the requirements of these Regulations in making the connection to and in the use of the sewer system.

## **9.0 FISCAL YEAR**

The fiscal year for the Authority shall be July 1 to June 30.

## **10.0 DEFINITIONS**

The following definitions shall apply in the interpretation of these Regulations except where inconsistent with the context in which the term or terms are used:

- a) Biochemical Oxygen Demand ("BOD") means the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions for five days. The determination of BOD shall be performed in accordance with the procedures prescribed in the latest edition of "Standard Methods for the Examination of Water and Wastewater" published by the American Health Association.
- b) Building Drain means that part of the lowest horizontal piping of a building plumbing which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five (5) feet (1.5 meters) outside the inner face of the building wall.
- c) Building means any structure including each individual residential unit in a multi-family or cluster housing complex.

d) Building Sewer means the extension from the building drain to the public sewer or other place of disposal.

e) Categorical Standards mean the National Categorical Pretreatment Standards or Pretreatment Standards.

f) Authority means the Water Pollution Control Authority of the Town of Brookfield.

g) Compatible Pollutant means BOD, suspended solids, pH and fecal coliform bacteria, and any additional pollutants identified in the water pollution control facility's NPDES permit where the water pollution control facility is designed to treat such pollutants and in fact does treat such pollutants to the degree required by the NPDES permit.

h) Composite Sample means a mixture of aliquot samples obtained at regular intervals over a time period. The volume of each aliquot is proportional to the discharge flow rate for the sampling intervals. The minimum time period for composite sampling shall be four (4) hours.

i) Cooling Water means process water in general used for cooling purposes to which the only pollutant added is heat and which has such characteristics that it may be discharged to a natural outlet in accordance with Federal, State and local laws, regulations and ordinances.

j) Commercial and industrial units shall mean any structures or portion of structures not defined as a residential dwelling unit, or a public or quasi-public unit.

1.] Commercial designation shall apply when the majority of the effluent discharged to the system is sanitary waste.

2.] Industrial designation shall apply when the majority of the effluent discharged to the system is industrial waste.

3.] Major industrial use shall mean when the industrial discharge averages a flow which exceeds the equivalent of 5,000 gallons per day.

k) Complexes shall mean structures or portions of structures containing two or more separate commercial, industrial and/or residential units with a common water source.

A separate unit in a complex shall mean any fully partitioned area in which a distinct and specific enterprise is conducted, and from which effluent is discharged.

l) Domestic Sewage means sewage that consists of water and human excretions or other water-borne wastes incidental to the occupancy of a residential building but not wastewater from water-softening equipment, commercial laundry, wastewater, and blowdown from heating and cooling equipment.

m) Floatable Oil is oil, fat or grease in a physical state such that it will separate by gravity from sewage by treatment in an approved pretreatment facility.

n) FOG - Fats, Oil and Grease means animal and plant derived substances that may solidify or become viscous between the temperatures of 32°F and 150°F (0°C to 65°C), and that separate from wastewater by gravity, including any edible substance identified as grease pursuant to the most current EPA method as listed in 40CFR 136.3.

- o) FOG Interceptor means a passive tank installed outside a building and designed to remove fats, oils, and grease from flowing wastewater while allowing wastewater to flow through it.
- p) FOG Management Equipment means a FOG Recovery Unit or an Alternate FOG Pretreatment System designed to actively remove fats, oil and grease from wastewater.
- q) FOG Recovery Unit means an active indoor mechanical system designed to remove fats, oil, and grease by physical separation from flowing wastewater. The term includes Type 1 Hydro Mechanical Grease Interceptors as defined by Standard PDI-G 101 of the Plumbing & Drainage Institute.
- r) Food Preparation Establishment means a Class III and Class IV food service establishments or any other facility determined by the Authority to discharge FOG above the set limits in Section 5(b)(2) of the Department of Environmental Protection's General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments. Such facilities shall include but not be limited to restaurants, hotel kitchens, hospital kitchens, school kitchens, bars, factory cafeterias, and clubs. Class III and Class IV food service establishments shall be as defined under Section 19-13-B42 of the State of Connecticut Public Health Code.
- s) Garbage means the animal or vegetable waste resulting from the handling, preparation, cooking or serving of foods.
- t) Grab Sample means a sample which is taken from a waste stream on a onetime basis with no regard to the flow in the waste stream and without consideration of time.
- u) Holding Tank Waste is any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks and septage hauling trucks.
- v) Incompatible Pollutant all pollutants other than compatible pollutants as defined in Section 10.0(g).
- w) Industrial Wastewater means all wastewater from industrial process, trade, or business and is distinct from domestic sewage.
- x) "May" is permissive (See "Shall").
- y) National Pollution Discharge Elimination System (NPDES) Permit - A permit issued pursuant to Section 402 of the Federal Water Pollution Control Act, also known as the Clean Water Act (33 USC 1342).
- z) Notification Of Approved Alternate FOG Pretreatment System means written notification from the Authority for authorization to install and/or operate an alternate FOG Pretreatment System.
- aa) Oil means oil which is of either mineral or vegetable origin, and disperses in water or sewage at temperatures between 0 degrees and 65 degrees C. For the purposes of these Regulations, emulsified oil shall be considered as soluble oil.
- bb) Person means any individual, partnership, joint venture, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents, or assigns. The masculine gender shall include the feminine, the singular shall include the plural where indicated by the context.

- cc) pH means the logarithm of the reciprocal of the hydrogen ion concentrations. The concentration is the weight of hydrogen ions, in grams, per liter of solution.
- dd) Pretreatment or Treatment means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into a water pollution control facility. The reduction or alteration can be obtained by physical, chemical or biological processes, except as prohibited by Title 40, Code of Federal Regulations, Section 403.6(d).
- ee) 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 having any dimension greater than 1/2 inch (1.27 centimeters).
- ff) Property owner means any person owning an interest in land, in fee or lesser estate or, a contract purchaser.
- gg) Public Sewer shall mean a common sanitary sewer controlled by a governmental agency or public utility.
- hh) Regional FOG Disposal Facility means a facility approved by the Connecticut Department of Environmental Protection for the collection and disposal of non-renderable FOG.
- ii) Renderable Fats, Oils, And Grease means material that can be recovered and sent to renderers for recycling into various usable products. Renderable grease is created from spent products collected at the source, such as frying oils and grease from restaurants. This material is also called yellow grease.
- jj) Renderable Fats, Oils, And Grease Container means a closed, leakproof container for the collection and storage of food grade fats, oil, and grease.
- kk) Residential Dwelling Unit shall mean a structure or portion of a structure which provides the ordinary comforts of living on a permanent or semi-permanent basis and shall specifically include single and multi-family dwelling units, apartment units, condominium units and mobile homes, and shall specifically exclude hotels, motels, and other forms of transient guest quarters.
- ll) Sanitary Sewer means a sewer which collects and conveys domestic sewage from residences, public buildings, commercial establishments, industries and institutions. A sanitary sewer may also collect and convey permitted industrial wastewater and unintentionally admitted ground, storm and surface waters.
- mm) Septage means the liquid and solids which are removed from a tank used as part of a subsurface sewage disposal system.
- nn) Septage hauler means any person offering to the public the general services of cleaning or servicing subsurface sewage disposal systems.
- oo) Sewage means human and animal excretions and all domestic and such manufacturing wastes as may tend to be detrimental to the public health.
- pp) Sewage Collection System means the structures and equipment, including pump stations, required to collect and convey sewage to the Water Pollution Control Facility.

- qq) Sewer System means all sewers, mains, lines, laterals, trunks, valves, pump stations and all processing equipment, including the treatment facility, for disposing of sewage.
- rr) Sewerage means all wastewater and septage from septic tanks and systems discharged directly or indirectly into the sewer system.
- ss) "Shall" is mandatory (See "May").
- tt) Slug means any sudden or excessive discharge which exceeds permitted levels either in terms of pollutant concentration, or instantaneous flow rate in such manner as to adversely affect the sewage collection system and/or the water pollution control facility.
- uu) Special Discharge Facilities means the installation of pretreatment, flow-equalizing or "off-peak discharge" facilities required by the Authority to:
- 1.] Reduce the biochemical oxygen demand to three hundred (300) parts per million, and the suspended solids to three hundred fifty (350) milligrams per liter; or
  - 2.] Reduce objectionable characteristics or constituents to within the maximum limits provided for, or
  - 3.] Control the quantities and rates of discharge of sewage to the public sewer system.
- vv) Storm Sewer means a sewer which collects and conveys storm water or groundwater.
- ww) Suspended Solids means the solid matter, measured in mg/liter, which may be in suspension, floatable, or settleable and removable by laboratory methods as prescribed in the latest edition of "Standard Methods for Examination of Water and Wastewater."
- xx) Toxic Pollutant means any pollutant or combination of pollutants listed as toxic in regulations promulgated by the Administrator of the Environmental Protection Agency under the provisions of Section 307 (a) of the Federal Water Pollution Control Act or other Acts.
- yy) Treatment Facility means the City of Danbury's Sewage Treatment Plant and all parts, additions and modifications thereto.
- zz) Except as used for billing purposes, unit shall mean a residential dwelling unit, public and/or quasi-public unit, commercial unit and/or industrial unit from which effluent is discharged.
- aaa) User is any person who contributes, causes or permits the contribution of sewage into the sewer system.
- bbb) Water Pollution Control Facility (WPCF) means an arrangement of devices for the treatment of sewage and sludge.

## **11.0 USE OF AUTHORITY EQUIPMENT**

### **11.1 PUMPS AND CONTROLS**

The Authority may maintain pumps and control boxes for temporary, emergency use by its customers in the event of a failure or during repair of such customer's pump or control equipment. Such equipment may be loaned to the customer (property owner) upon such customer's written request stating: a) nature of equipment failure: b) property location affected by such failure; c) nature of equipment requested; d) intended use of equipment; and proposed length of use of such equipment (not to exceed fifteen (15) days).

Said request shall be accompanied by a bank check or certified check made payable to the Authority, or by wire transfer or by cash, in an amount equal to the cost of the loaned equipment, to be held by the Authority as security to insure the return of such loaned equipment in good and proper operating condition within the loan period specified.

## **11.2 CONFINED SPACE EQUIPMENT**

To facilitate the use of proper safety precautions by those persons who find it necessary to perform work in confined space conditions, the Authority may maintain confined space equipment for loan to customers or contractors performing such work on or in connection with the Brookfield municipal sewerage system.

Persons using such equipment shall be trained and certified for work in confined spaces, and shall provide proof of such training and certification to the Authority together with an agreement to indemnify and hold the Town of Brookfield and the Brookfield Water Pollution Control Authority, their agents and employees, harmless from all injury or death arising from the use of such equipment. **Such equipment shall be used only when a representative of the Authority is present** and only within the limits of the Town of Brookfield.

The Authority shall establish reasonable fees to defray the cost and depreciation of such confined space equipment. Such fees shall be paid in advance of the use of said equipment by such owner or contractor. In addition, a certified check made payable to the Authority, or cash, in an amount determined by the Authority shall be paid as security to insure the return of such loaned equipment in good and proper operating condition.

## **12.0 SAVINGS CLAUSE**

The invalidity of any section, clause, sentence or provision of these Regulations shall not affect the validity of any other part of these Regulations.

## **TECHNICAL STANDARDS**

### **A-1.0 BUILDING SEWERS: EXCAVATION AND INSPECTION REQUIREMENTS**

All excavations required for the installation of a building sewer shall be open trench work, unless otherwise approved by the Authority. The water level in the trench shall be maintained at a level below the building sewer.

If the sewer installation requires an electrical service, such as a pump station power circuit, the electrical service shall be in a separate trench from the sewer pipe(s). Except as otherwise approved by the Authority, the trenches shall be separated four feet, horizontally, at the closest walls of the trenches; not centerline-to-centerline.

No trench containing a building sewer shall be backfilled until the Authority has completed an inspection of and approved the work.

All excavations for building sewer installations shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways and other public property may be disturbed in the course of the work only pursuant to a permit issued to the Applicant by the Department of Public Works or the Department of Transportation, as applicable, and shall be restored in a manner satisfactory to such Department.

The Applicant for the Sewer Connection Permit shall notify the Authority when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the Authority or its authorized agent. Special fittings may be used for the connection of the building sewer to the public sewer only when approved by the Authority or its authorized agent.

No discharge into the public sewer shall be made until such time as the building sewer and connection has been inspected and approved by the Authority and until a Sewer Discharge Permit has been issued.

### **A-1.1 BUILDING SEWERS: SIZE, SLOPE & LOCATION REQUIREMENTS**

The size of and slope of the building sewer shall be subject to the approval of the Authority, but in no event shall the diameter be less than six (6) inches, except as provided in Section 2.1.1. The slope of such six-inch pipe shall not be less than one-quarter inch per foot except as otherwise authorized by the Authority.



Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. No building sewer shall be laid parallel to or within three (3) feet of any bearing wall, which might thereby be weakened. The depth shall be sufficient to afford protection from frost. The building sewer shall be laid at uniform grade and in straight alignment insofar as possible.

\* \* \*

For multi-family buildings, the Authority may require the installation of a separate and independent building sewer line for each dwelling unit.

For multi-family buildings and for commercial and industrial developments, the Owner may propose or the Authority may require the installation of onsite collector sewers and laterals. Such installations shall be designed and constructed to the requirements of Technical Standard A-2.3 for Sewer System Expansion and the Standard Construction Details, and shall be presented to the Authority in substantial compliance with Section 4.3.1, Application Form and Requirements. Changes in direction of onsite collector sewers and laterals shall be made only with manholes, or if specifically approved, properly curved pipes and fittings.

**A-1.2 BUILDING SEWERS: PIPE REQUIREMENTS:**

Generally, each building sewer shall be constructed of an approved building sewer pipe and in a manner as specified in Table 2-A of the Connecticut Public Health Code – On-site Sewage Disposal Regulation and Technical Standards for Subsurface Sewage Disposal Systems, last Revised January 2023, attached hereto and made part of these Regulations. No cast iron or ductile iron piping shall be allowed on the incoming or the outcoming line following the or grease interceptor tank due to the corrosive nature of the effluent. Deviations can be approved by the BWPCA, on a case-by-case basis.

Joints shall be tight, flexible, and waterproof. Pipe shall be uniformly bedded on a tamped granular material. The building sewer shall be installed in a separate trench not less than ten feet (10') horizontally from any underground water service pipe. PVC pipe shall be laid on a tamped sand bed and the trench shall be filled to a depth not less than twelve inches (12") above the pipe with tamped sand, compacted sufficiently on all sides to prevent pipe distortion from vertical loads. Ductile iron pipe or C900 with watertight joints may be required by the Authority where the building sewer is exposed to damage by tree roots. If installed in filled or unstable ground or

at a depth of less than three feet (3'), the building sewer shall be of Ductile iron pipe or C-900, except that non-metallic material may be accepted if laid on a suitable concrete bed or cradle or encased, as approved by the Authority.

Each building sewer shall be provided with risers and clean-outs acceptable to the Authority outside the building, at changes of grade or line, and at seventy-five foot (75') intervals where the building sewer is over seventy-five feet (75') long. A riser and clean-out shall be installed on the building sewer in the vicinity of the property line in a location approved by the Authority, for single-family residential properties. For commercial properties and multi-family residential developments, a manhole shall be installed on the sewer line in the vicinity of the property line.

In accordance with the Connecticut Public Health Code – On-site Sewage Disposal Regulation and Technical Standards for Subsurface Sewage Disposal Systems, last Revised January 2023; no building sewer distribution pipe shall be constructed within 25 feet of a water supply well having a yield of 10 gallons or less per minute; 75 feet of a water supply well having a yield of 10-50 gallons or less per minute; and 100 feet of a water supply well having a yield of 50 gallons or greater per minute.

### **A-1.3 BUILDING SEWER: SEWAGE PUMPING FACILITIES**

In all buildings in which a building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such drain shall be lifted by an approved artificial means and discharged to the building sewer. All lift station design and installation must be approved by the Authority. All electrical and plumbing work shall be performed by licensed contractors. The pumping facilities shall be constructed in accordance with the specifications set forth in Section A-1.3.1, except that for large installations, the Authority reserves the right to require chambers with a greater storage volume, duplex pumping, and higher capacity pumps. Prior to purchasing or installation of any equipment, the Applicant shall arrange a site visit with Authority personnel to review and discuss the installation and the type and location of all equipment.

#### **A-1.3.1 BUILDING SEWER: SEWAGE PUMPING FACILITIES CONSTRUCTION REQUIREMENTS**

Pump Chamber: Exterior pump chambers / structures are deemed "sources of pollution" under the Connecticut Public Health Code and shall be located not less than 75 feet from any

water supply wells with a yield of 10 gallons or less per minute. For water supply wells with a greater yield, minimum separating distances shall be determined in accordance with the requirements of Section 19-13-B51d of the Connecticut Public Health Code. Each pump chamber shall be a pre-cast concrete combination submersible pump chamber and wet well having a minimum 1000 gallon capacity, constructed of not less than 4000 psi concrete with steel reinforcement adequate to withstand lateral earth and traffic loading. Suitable access hatch / cover(s) shall be provided for each chamber. The chamber shall be equal to the 1000 gallon rectangular H-20 pump chamber manufactured by Eastern Precast Company of Brookfield, Connecticut. The chamber shall be capable of supporting an H-20 traffic loading, shall have a 1.25 safety factor against uplift (with the chamber empty and ground water levels at the surface), and shall have an approved bottom slope.

Pumps: Each pump shall be a submersible grinder pump. Impellers shall be designed to match the head/flow conditions for the specific installation. Pumps shall be of a single phase, 2 horsepower, 60 Hz, 3500 rpm, 230 volt capacitor start and run design. Pumps shall be furnished with seal sensor options, and check valves, lifting chains and other spare parts as recommended by the manufacturer. Signed and sealed design calculations shall be provided by a licensed professional engineer, together with design criteria.

Piping: Refer to A-1.2 Pipe Requirements.

Controls: The pump control system shall be housed in a NEMA 3R weatherproof steel dead-front 16"x12"x7" enclosure, with locking hasp, The panel shall include the pump circuit breaker, central circuit breaker, Hp-rated magnetic connector, 115V control circuit, start and run capacitors, starting relay run indicator light, Hand-Off-Auto switch, , alarm circuitry with flashing red alarm light and/or alarm bell (as required by the Authority); terminal strips for all external wiring connections, and transponder type pump controls with high level float switches. Alarms shall include, as a minimum, high level, low level, and power failure. The control cabinet shall be mounted on an approved exterior stanchion or surface mounted on the exterior wall of the building, with the alarm light in a location clearly visible from the street. The furnished padlock shall be keyed to the Authority's master template. All electrical work shall be performed by a licensed electrician.

Maintenance: All pumping facilities shall be maintained in proper working condition by the property owner and as may specially be required by the Authority. At a minimum, the property owner shall provide for the regular cleaning of wet wells to eliminate odors; the protection and cleaning of float switches from grease and debris; the inspection, and if necessary, the repair, of all electrical equipment by a licensed electrician at least once every two years; and the removal and inspection of the pump at least once a year for wear and seal leakage, and the repair thereof as necessary. Within thirty days following the conclusion of each calendar year, the owner shall file a report describing the prior year's pump facilities maintenance in a form acceptable to the Authority.

General: If any equipment specified in these Regulations is not available, the Authority may specify an alternative suitable equivalent item or equipment.

#### **A-1.4 BUILDING SEWER: EXTERNAL FOG INTERCEPTOR REQUIREMENTS**

Exterior FOG interceptors are deemed "sources of pollution" under the Connecticut Public Health Code and shall be located not less than 75 feet from any water supply wells with a yield of 10 gallons or less per minute. For water supply wells with a greater yield, minimum separating distances shall be determined in accordance with the requirements of Section 19-13-B51d of the Connecticut Public Health Code.

All external FOG Interceptors shall be of a type and capacity approved by the Authority or its designated agent and shall be easily accessible for cleaning and inspection. FOG Interceptors shall be constructed of impervious, non-corrosive materials capable of withstanding abrupt and extreme changes in temperature, and capable of sustaining H-20 vehicle loading. FOG Interceptors shall be of substantial construction, watertight and equipped with manhole frames and easily removable covers. Each unit shall provide for access at each end of the chamber, so that maintenance can be done at the inlet and outlet. FOG Interceptors shall be designed in accordance with the Brookfield WPCA standard detail(s).

FOG Interceptors shall have a minimum capacity of 1,000 gallons. Subject to such minimum sizing, the Authority will establish sizing as follows:

- a) Flow rate shall be based on fixture drainage in a 1 minute period or flow capacity of the drainage line into the FOG Interceptor;
- b) Additional allowance shall be made for dishwashers or other grease discharging equipment;

- c) The FOG Interceptor shall have a minimum hydraulic retention time of 30 minutes. The total flow rates found in (a) and (b) above shall be multiplied by 30 minutes to obtain the base capacity of the FOG Interceptor.
- d) The FOG Interceptor base capacity calculated in (c) above shall be used, plus a factor of 50% to allow for reserve capacity;
- e) Where higher grease or oil concentrations are expected, a factor of up to 100% may be required by the Authority for reserve capacity;
- f) The chamber shall have a 1.25 safety factor against uplift (with the chamber empty and ground water level at the surface) and shall have an approved bottom slope. Each unit shall provide for access at each end of the chamber.
- g) for restaurants over 100 seats, or for oriental and fast food restaurants, the Authority will determine required FOG Interceptor sizes based on anticipated flows and estimated grease/oil capacities.

The FOG Interceptor shall be installed on a separate building sewer servicing only flows from the kitchen or food preparation areas. ***Except as otherwise authorized by the Authority, the inlet shall be PVC ASTM D 1785 Schedule 40 with rubber compression gaskets or solvent weld couplings. The joints must meet ASTM 3212 specifications. A tee pipe fitting shall be utilized on the Interceptor's inlet and outlet pipes.*** The tee-pipe of the inlet and outlet shall extend to within twelve inches of the bottom and at least five inches above the liquid level of the tank.

All building plumbing facilities shall be constructed, operated and maintained in a manner to ensure that the discharge of food preparation wastewater is directed solely to the FOG Interceptor. No valve or piping bypass equipment that could permit the discharge of food preparation wastewater to bypass the FOG Interceptor shall be permitted. Exterior FOG interceptors shall be a minimum of 10-ft from the building face. No chemical and/or biological additives shall be used in the building's plumbing or sanitary sewer lines or in the FOG Interceptor to control or dissolve fats, oils and grease.

FOG Interceptor location, flow control, venting and other installation details shall otherwise conform to the Standard Details, International Plumbing Code (State Building Code), and to the recommendations of the Plumbing and Drainage Institute. The BWPCA will not accept any influent into their system of excessive temperatures (over 150° F).

Grease interceptor tanks shall comply with horizontal separation distances to stormwater infiltration systems, as listed in Appendix Table 1. The BWPCA shall have the authority to reduce this requirement on a case-by-case basis if no other alternative exists.

### **A-1.5 ALTERNATE FOG MANAGEMENT EQUIPMENT**

When it is not practical for the property owner in whose existing building a Food Preparation Establishment exists to install an external FOG Interceptor, an alternate internal FOG Recovery Unit or an alternate internal FOG Pretreatment System designed to actively remove fats, oils and grease by physical separation from flowing wastewater may be utilized with the approval of the Authority. The Authority will approve these units and/or systems on a case-by-case basis based on demonstrated removal efficiencies and reliability of operation.

The application for approval of FOG Management Equipment shall include:

(a) Documented evidence that the FOG Recovery Unit or the alternate FOG Pretreatment System for which approval is sought will not discharge FOG concentrations that exceed one hundred (100) milligrams per liter of fat, oil or grease or which contain more than twenty (20) milligrams per liter of floatable fat, oil or grease or which contains substances that may solidify or become viscous at temperatures between thirty-two (32) and one hundred fifty degrees (150) Fahrenheit.

Alternate internal FOG Recovery Units and alternate internal FOG Pretreatment Systems shall be sized in accordance with the following requirements based on Standard PDI-G101 of the Plumbing & Drainage Institute unless otherwise determined by the Authority:

- 1) Flow rate shall be based on fixture drainage in a 1 minute period;
- 2) Procedure for sizing FOG Recovery Units and alternate FOG Pretreatment Systems shall be in accordance with Table 8.3.2. Multiple fixtures served by a single interceptor shall be sized in accordance with Section 8.5 of Standard PDI-G101.
- 3) A separate FOG Recovery Unit or FOG Pretreatment System shall be provided for each commercial dishwasher, sized in accordance with Section 8.4 of Standard PDI-G101;
- 4) For the Unit/System capacity calculated in (2) above, a factor of 50% shall be added to the capacity to allow for reserve capacity;
- 5) Where higher grease or oil concentrations are expected, a factor of up to 100% may be required by the Authority for reserve capacity;

6) For restaurants over 100 seats, or for oriental and fast food restaurants, the Authority will determine required FOG Recovery Unit or FOG Pretreatment System sizes based on anticipated flows, estimated grease/oil capacities of available equipment and estimated required reserve capacity necessary to insure proper functioning of the FOG Units and/or System.

(b) Plans and specifications for the proposed system including plans and profile of system installation, manufacturer's literature, documentation of performance and any other information detailing the alternate system.

(c) A written Operation and Maintenance Plan, which shall include the schedule for cleaning and maintenance, copies of maintenance log forms, a list of spare parts to be maintained at the subject facility, and a list of contacts for the manufacturer and supplier. Following approval by the Authority, the Operation and Maintenance Plan shall be permanently maintained on the premises and shall be available on demand for inspection by the Authority and its designated agent

(d) A written FOG Minimization Plan, which shall include procedures for all Food Preparation Establishment employees to minimize FOG entering the wastewater collection system.

(e) A Description of a FOG Pretreatment Training Program for Food Preparation Establishment employees in FOG minimization procedures.

When an internal FOG Recovery Unit is proposed, it shall be sized to properly pre-treat the anticipated flows using methods approved by the Authority. Such Units shall be constructed of corrosion-resistant material such as stainless steel or plastic and shall operate using a skimming device, automatic draw-off or other mechanical means to automatically remove separated FOG. Such devices shall be controlled using a timer, FOG sensor, or other means of automatic operation. FOG Recovery Units operated by timer shall be set to operate no less than once per day. Solids shall be intercepted and separated from the effluent flow using a strainer mechanism that is integral to the unit. FOG Recovery Units shall include an internal or external flow control device. FOG Recovery Units shall be located to permit frequent access for maintenance, cleaning and inspection.

When FOG Management Equipment, consisting of an internal FOG Recovery Unit or an alternate FOG Pretreatment System is utilized, no chemical and/or biological additives shall be used in the building's plumbing or in components of the FOG Recovery Unit or FOG Pretreatment System to control or dissolve fats, oils and grease. All plumbing and plumbing

fixtures shall be constructed, operated and maintained, in a manner to ensure that the discharge of food preparation wastewater is directed solely to the FOG Management Equipment. No valve or piping bypass equipment that could prevent the discharge of food preparation wastewater from entering the appropriate treatment equipment shall be present.

Unit location, flow control, venting and other installation details shall otherwise conform to the Standard Details, the International Plumbing Code (as incorporated into the State Building Code) and to the recommendations of the Plumbing and Drainage Institute.

#### **A-1.6 BUILDING SEWER: OIL AND SAND INTERCEPTORS**

Special oil and sand interceptors shall be provided for non domestic waste when such interceptors are, in the opinion of the Authority, necessary for the proper handling of liquid wastes containing oil, grease, any flammable waste, sand or any other harmful waste.

All oil and sand interceptors shall be of a type and capacity approved by the Authority or its designated agent and shall be easily accessible for cleaning and inspection; shall be constructed of impervious, non-corrosive materials capable of withstanding abrupt and extreme changes in temperature, and capable of sustaining H-20 vehicle loading. Such interceptors shall be of substantial construction, watertight and equipped with manhole frames. Each interceptor shall provide for access at each end of the chamber. Chambers shall be designed in conformance with the BWPCA standard details.

#### **A-2.0 SEWERAGE SYSTEM EXPANSION**

##### **A-2.1 SEWERAGE SYSTEM EXPANSION: GENERAL NOTES REQUIRED**

The following "General Notes" must appear on each map or plan depicting a proposed expansion or upgrade of the sewage collection system:

- a. Sanitary sewer mains to be \_\_\_\_\_ (state pipe material and class.)
- b. Building Sewer Connection to be 6-inch diameter \_\_\_\_\_ (state pipe material and class.) State material of both inlet and outlet pipe to FOG interceptor, if different.
- c. Six-inch wyes to be used for Building Sewer Connection, with 6 inch cleanouts at 75 foot intervals.
- d. Sanitary sewers to be constructed in compliance with the "Standard Details" and the "Sewer Use Regulations" of the Brookfield Water Pollution Control Authority.



- e. Building Sewers to be extended to within five feet of the Building Outlet.
- f. Elevations based on U.S.C. & G.S. datum of mean sea level. (Show federal bench mark established for this project.)
- g. No shrubs shall be planted within five feet of sanitary sewer mains or laterals. No trees shall be planted within ten feet of sanitary sewer mains or laterals.
- h. No deviation from these documents will be permitted without prior approval of the Brookfield Water Pollution Control Authority Engineer. Ambiguities and inconsistencies in the Specifications shall be referred to the Brookfield Water Pollution Control Authority Engineer for clarification.

**A-2.2 SEWERAGE SYSTEM EXPANSION: STANDARD DETAILS REQUIRED**

The "Standard Details" on file in the office of the Brookfield Water Pollution Control Authority must be attached or otherwise incorporated in each plan depicting a proposed expansion or upgrade of the sewage collection system.

**A-2.3 SEWERAGE SYSTEM EXPANSION: REQUIRED CONSTRUCTION SPECIFICATIONS**

All construction associated with the expansion, modification or improvement of the sewage collection system shall conform to the following "Construction Specifications". Such specifications shall, by virtue of these Regulations, form a part of each contract made by the Applicant for any construction authorized pursuant to any Expansion Permit issued by the Authority:

**SECTION 1 EARTHWORK AND BACKFILL**

**A: LIMITS OF EXCAVATION:** Excavations shall be made to the approved lines which shall be of sufficient width outside the structures to give room for placing and removing forms for concrete and for forming the pipe joints. In general, the widths of pipe trenches shall not be wider than the outside diameter of the pipe barrel plus 2 feet at the level of one foot above the top of the pipe unless otherwise approved. Blasting for rock excavation will be permitted only on approval of methods, and in compliance with applicable federal, state and local regulations.

**B: STORAGE AND DISPOSAL:** Excavated material, which is suitable and approved for backfill and fill shall be placed in storage piles until it can be placed in the work. It shall not

be placed close to the sides of excavations, where the weight of the material could create a surcharge on such sides, whether sheeted or not.

Unsuitable material, or material in excess of that required for fill, backfill or other purposes, including any stored surplus, shall be disposed of away from the sewer construction site, in an approved location.

C: SHEETING AND BRACING: In any trench where supports are required by State or Federal regulations (generally over 5-feet) or where excavations are made with sides which require supporting, sheeting and bracing shall be used of sufficient strength to sustain the sides of the excavations and to prevent movement which could in any way injure the works, or diminish the working space sufficiently to delay the work. Sheeting shall be of a material that will not split while being driven. Special precautions shall be taken where there is additional pressure due to the presence of other structures, and in such case, the Applicant shall submit, for the approval by the Brookfield Water Pollution Control Authority's Engineer, an outline plan showing the lines on which the Applicant proposes to drive sheeting and the method proposed for bracing against the loads imposed by the structure. Such plan shall be prepared by a Professional Engineer licensed by the State of Connecticut and said plan shall bear the signature and seal of said Engineer.

In trenches twelve feet (12') in depth and less, or where the pipe is not closer than 20 feet to any existing building, house, or garage, sheeting and bracing may be removed at the Applicant's option, providing that such removal will not endanger the work, adjacent utilities or cause settlement of pavements. In trenches greater 12 feet in depth, or where the pipe is closer than 20 feet to any existing building, house or garage, the Applicant will be required to leave sheeting in place. After backfilling the trench, no sheeting shall extend to within 18 inches of the original ground surface.

D: DEWATERING: Adequate facilities and equipment, including as necessary, well points and cofferdams, shall be provided and operated to contain, collect and pump to suitable places for disposal all water entering excavations or other parts of the work. All excavations shall be kept free of water until the work or structure to be built therein is completed. If such water is contaminated or flammable, precautions shall be taken as required by State, Federal, or local regulations.

E: BACKFILL AND FILL: All backfill and fill under pipes and all structures shall consist of suitable approved foundation material. All other backfill and fill, unless otherwise specified or required, shall consist of a suitable approved earth or sand, generally from storage of approved suitable excavated material, free from rejected organic matter, boggy, peaty humus or other unsuitable material such as unconsolidated silt, rubbish, waste, ashes, cinders or with more than 15% of size 200 sieve material. If sufficient suitable material for backfill is not available from the excavated material, as determined by the Brookfield Water Pollution Control Authority's Engineer, the Applicant shall procure elsewhere a sufficient quantity of suitable bank run sand or gravel and shall furnish and place such material. No frozen earth shall be used for backfill, and all stones more than 4 inches in the largest dimension shall be removed from acceptable earth for fill.

No backfill shall be placed until the structure has been inspected in place and approved backfilling shall be carried out as soon as possible after such approval.

Foundation material, ¾" crushed stone or equivalent, shall be placed underneath the pipe for a minimum of 6 inches for gravity sewer pipe. Foundation material shall be placed up to the pipe springline. For PVC forcemains, foundation material shall be approved sand and shall be placed a minimum of 6 inches underneath the pipe up to 6 inch above the forcemain. The BWPCA shall increase depth of foundation material if subgrade is unsuitable.

Trenches shall be backfilled to a depth of 12 inches over gravity pipe, and compacted on either side of the pipe with mechanical tampers, with bank run sand and gravel or equivalent. After a compacted coverage of 12 inches has been made, the remainder of the trench shall be compactly filled in an approved manner. Bulldozing of backfill material into trenches will be prohibited unless it is done in uniformly spread layers, not over 12 inches thick and immediately machine tamped.

Material shall be provided as required to compensate for settlement of backfill and fill.

When sheeting is being withdrawn, all cavities left thereby shall be tilled with suitable granular earth, hosed or tamped in place so as to fill all voids thoroughly.

All construction must meet the requirements of the State Construction codes, and the Federal Occupational Safety & Health Act (OSHA) regulations. All safety requirements for the protection of personnel, public officials, or the general public, are the obligation of the Applicant and any subcontractors. The Authority, the Engineer, and Town officials are not responsible for

the Applicant's proper safety precautions under any circumstances or because of any action or lack of action on their part.

**F: SAND, STONE AND GRAVEL:** Bank run sand and gravel or equivalent material shall consist of hard, sharp, clean granular material, free of organic matter. The material shall be free of any considerable amount of flat, laminated or elongated particles, silt, clay, limestone, shale or other deleterious matter. The material must be capable of compaction to the densities specified or required by the Brookfield Water Pollution Control Authority's Engineer. The material shall contain no stones larger than 4 inches in their largest dimension, and no more than 15% of the material by weight shall pass a No. 200 sieve.

Gravel and crushed stone shall consist of hard, sharp, clean material. The material shall be free from fines, shells, clay, limestone, shale or other deleterious matter. Material shall be supplied as a mixture of sizes with 5% to 10% of the material passing a No. 40 sieve and the remainder ranging in size from 3/8 to 1 inch.

Foundation material shall be placed and firmly compacted by mechanical tamping equipment. Care shall be taken to place and compact material under pipe haunches.

Foundation material shall consist of clean gravel or crushed stone, as specified above, as approved; it shall not include bank run or excavated material.

Where trench slopes exceed 10%, a clay dam (12" thick) shall be installed at 50-foot intervals.

## **SECTION 2: PIPE AND PIPE LAYING**

**General:** All gravity and force main sewers shall be buried a minimum of forty-eight inches (48") to the top of the pipe unless otherwise approved by the Authority or its engineer.

**Water Supply Wells:** Pipe for sewer mains are deemed "sources of pollution" under the Connecticut Public Health Code and shall be located not less than 25 feet from any water supply wells with a yield of 10 gallons or less per minute. For water supply wells with a greater yield, minimum separating distances shall be determined in accordance with the requirements of Section 19-13-B51d of the Connecticut Public Health Code.

Sewer pipe located within the sanitary radius of a water supply well (e.g. more than 25 feet but less than 75 feet from a well having a yield of 10 gallons per minute or less) shall be constructed of a pipe material and in accordance with the requirements of Table 2-B of the Technical Standards of the Connecticut Public Health Code, revision of January 1, 2018,

attached hereto and made part of these Regulations. When a water supply well is not implicated, the following provisions apply:

A: PVC PIPE: PVC pipe and fittings shall be polyvinyl chloride plain end or bell and spigot pipe, meeting the requirements of ASTM Specification D3034, SDR35, and equal to the products of Certain-Teed Products Corporation. Pipe joints shall be rubber gasket O-ring joints. The plastic material shall be equal to Type I Grade I or the Specifications for Rigid Polyvinyl Chloride Compounds, ASTM Designation D-1784.

The pipe shall be capable of carrying a trench load equal to 25 feet of cover. Under conditions of maximum cover, the pipe shall be adequate to maintain a factor of safety of two against collapse. Cross sectional deflection shall be less than 5-percent after cover material has been placed and compacted. Axial deflection shall be less than 1/4 inch per 10 lineal feet of pipe.

Pipe joints shall be made in accordance with the recommendations of the manufacturer. Pipe joints at manholes shall be provided with an approved flexible waterstop to insure watertightness.

The temperature of the pipe shall be carefully controlled during storage and installation to prevent linear expansions or contractions that may stress pipe joints. PVC pipe shall not be exposed to sunlight for extended periods, nor to freezing condition, but shall be covered or stored indoors.

Private force mains for single family lots and small commercial developments and shall be PVC SDR-21 pipe with bell and spigot joints with rubber gaskets. Force main material for municipal work shall be decided on a case-by-case basis by the BWPCA. Material shall be capable of conveying effluent of 140° F.

B: DUCTILE IRON PIPE AND FITTINGS: Ductile iron pipe shall be flexible (bell/spigot) joint or mechanical joint, at the Applicant's option, may be used for municipal force mains or stream crossings. Such pipe may be used for gravity sewers as well and will be required where slopes exceed 10%, in high stress locations, or in the vicinity of wells with minimum separating distances from wells determined in accordance with the requirements of Section 19-13-B51d and the Technical Standards, revision of January 2023, of the Connecticut Public Health Code.

Ductile iron pipe fittings (including bends, tees, etc.) shall be furnished with mechanical joint bells on all inlets, outlets, and branches, even though they may be used for flexible joint pipe. Flexible couplings shall be constructed of steel and shall be equal to Style 38 of The Dresser Manufacturing Division, or similar product of the Smith Blair Corp.

All ductile iron pipe and fittings shall conform in all respects to ASA Standard A 21.51 for Thickness Class 52 or Class 53. Flexible joint pipe shall be equal to the "Tyton Joint" pipe manufactured by the United States Pipe and Foundry Company, or the "Super Bell-Tite Push-On Joint" pipe manufactured by The Clow Corp. Mechanical joint pipe and fittings shall conform to ASA Standard A 21.11 and shall be equal to the product of the aforementioned manufacturers. Gaskets shall be full faced, furnished with plain tips. Gasket dimensions shall be in accordance with the manufacturer's standard design of dimensions and tolerances.

Plain ends of pipe for coupling joints shall be prepared in strict accordance with the requirements and instructions of the manufacturer of the coupling to be used.

All ductile iron pipe and fittings shall be mortar lined and shall have a protective internal lining consisting of two coats of asphaltum varnish and an exterior coating of an approved tar pitch varnish.

At all horizontal and vertical bends of 22 1/2 degrees or greater, force main pipe shall be harnessed back a minimum of 30 ft. in both directions. Harness rods shall be 3/4-inch in diameter, AISC, A-50 High strength steel, conforming to the requirements of ASTM Designation A325. Where harness rods are used in conjunction with bell-spigot joint pipe, approved socket clamps shall be installed to brace the pipe bells against movement. The set bolts in all clamps shall be torqued to a minimum of 70 foot-lbs to provide an adequate friction fit against movement. As an alternative, locking joints may be used if approved by the Brookfield Water Pollution Control Authority's Engineer, Megalug or approved equal.

All couplings, harness rods, clamps, and connectors shall be coated with double two mil thick coats of Inertol 49 Thick, or equal. The total dry film thickness of the combined coats shall be at least 4 mils.

C: SEWER PIPE: Except for sewer pipe installed within the sanitary radius of a water supply well, choice of sewer pipe 12 inches or smaller shall be optional as follows: (For larger pipe or for installation at greater depths, specific analysis and pipe selection will be required, meeting with approval of the Authority).

Sewer Pipe Size (inches)	Depth from Finished Grade to Pipe Invert (feet)			<u>Permissible Choices</u>
		To		
8	0	To	10	Ductile Iron Pipe, Class 52; PVC SDR 35
8	10	To	20	Ductile Iron pipe, Class 52; PVCSDR 35
10	0	To	10	Ductile Iron pipe, Class 52; PVCSDR 35
10	10	To	20	Ductile Iron pipe, Class 53; PVC SDR 35
12	0	To	10	Ductile Iron pipe, Class52; PVC SDR 35
12	10	To	20	Ductile Iron Class 53; PVC Pressure Pipe.

**D: HOUSE CONNECTIONS:** House connections shall be as shown on the Standard Details and as specified herein. Except as otherwise shown, house connections shall be six (6) inches in diameter. House connections shall conform to the requirements of Technical Standards, Section A-1.2 - Building Sewers - Piping Requirements. On all street sewers, only wye outlets shall be used.

The Applicant shall mark the curb or pavement opposite the end of each house connection, in a suitable and approved permanent manner by scoring where curbs or pavements exists, or by well-marked permanent stakes elsewhere. The curb location of each house connection shall be recorded with: a) the distance from the downstream manhole, and b) two tie dimensions from permanent structures (poles, building corners, etc.).

PVC or ductile iron vertical cleanouts shall be provided outside the building, at all horizontal bends, at 75-foot intervals, and at the front property line. Cleanouts shall be connected to a wye at the house connection and shall have a cast iron frame and cover extending 1 inch above grade, in accordance with the BWPCA standard details.

**E: PIPE LAYING AND INSTALLATION:** All pipe and fittings shall be installed to the lines, elevations and grades shown or ordered, and in accordance with the manufacturer's recommendations.

Suitable tools and equipment shall be used for proper handling, storing, and laying of pipe and fittings. In order to avoid damage to interior coatings, lifting hooks shall not be inserted therein.

O-rings and gaskets shall be stored in locations where air temperatures are maintained within the manufacturer's tolerances, and shall not be exposed to sunlight for periods of more than one (1) hour.

Each pipe and fitting shall be checked for defects and injuries as installation proceeds. Imperfect pipe materials shall be rejected and removed from the work. Pipe found to be defective after installation shall be removed and replaced by undamaged material.

The Applicant shall excavate and dewater the trench below the pipe invert, to limits shown or ordered, and place the pipe on foundation material, as shown, specified or ordered.

**F: TESTING:**

The Applicant shall notify the Authority's Engineer five days in advance of the time the test is to be made. No test shall be accepted unless witnessed by the Authority's Engineer or his authorized representative. The Applicant shall bear all costs of all pipe leakage tests. The Applicant shall provide all necessary facilities, water, bulkheads, plugs, air compressors, measuring devices, pumps, apparatus and all required labor therefore. If a test fails, repairs should be made and the test shall be redone until passing.

**Pressure Pipe:**

Pressure pipe shall be hydrostatically tested in accordance with AWWA C-600 or AWWA C-900. All visual leaks shall be made tight.

**Non-Pressure Pipe:**

Gravity pipe shall be tested using low pressure air test. Testing shall be done in accordance with ASTM F1417-11A.

**SECTION 3: MANHOLES**

**A: PRECAST CONCRETE MANHOLES:** Unless otherwise approved, manholes shall be constructed of precast reinforced concrete riser sections, an eccentric conical or flat top section, and a cross-section as shown or required, and shall be equal to International Pipe and



Ceramics Corp. or Armco Steel Corp. precast concrete manholes. Where required, eccentric reducing sections shall be used to join riser sections of different diameters. Manufacture shall be by wet, monolithic process.

Precast manhole sections shall be manufactured in accordance with ASTM Designation C478. The minimum compressive strength of the concrete for all sections shall be 4000 lbs. per sq. inch. The maximum allowable absorption of the concrete shall not exceed 8% of the dry weight. Tests shall be similar to those described in ASTM C76. The circumferential reinforcement in the walls of all sections shall be a minimum of 0.12 sq. in. per linear ft. for inside diameters up to and including 54 in., and 0.17 sq. in. per linear ft. for the larger sizes. Reinforcement in flat slab top sections shall be designed for the load to be supported. Additional reinforcement shall be provided at all openings larger than 6 inches.

Joints of the manhole sections shall be formed entirely of concrete in accordance with ASTM Designated C361 and shall be made with a keyed joint and round rubber gasket installed in accordance with the manufacturer's recommendations. Joints shall be self-centered and watertight against internal and external hydrostatic pressure with only the gasket utilized as the sealing element. Ship lap joints with rubber butyl sealant may also be utilized, as approved by the Authority or its Engineer. Each joint shall be mortared on the inside and outside before backfilling.

Base sections shall be furnished by the manufacturer with embedded boot couplings or connectors. Contractor shall pour and form concrete trough and bench in the field. Brick inverts may be acceptable on a case-by-case basis.

There shall be two (2) flexible joints on each pipe and within 24" outside the manhole wall, one of which may be embedded in the manhole wall.

Waterways shall be constructed in the field after the manhole has been installed, and shall conform to the shape and size of connecting pipes as shown on the Standard Details or ordered by the Brookfield Water Pollution Control Authority's Engineer. Special care shall be taken to form channels with curved shapes that will provide the best hydraulic conditions for smooth flow. Benches shall be entirely of monolithically poured concrete and shall be sloped to drain to the waterways. Concrete used in forming waterways shall be a stiff, rich mix and shall be given a steel trowel finish.

Interior and exterior surfaces of riser sections, conical sections, and the undersides of the flat slab top sections, shall be given a protective lining consisting of 2 shop coats of asphaltic paint equal to Inertol No. 49, for pump station manholes. Other manholes, not for pump stations, shall only require coating on the exterior surface. Foundation material under manholes shall conform to that specified in the Standard Details.

**B: MANHOLE APPURTENANCES:** Appurtenances shall include manhole frames and covers, and manhole rungs. (See Standard Details).

Unless otherwise indicated, manhole frames and covers shall be as required by the standard BWPCA details. Frames shall be set in grout on the precast top section. Where necessary, a maximum of 2 courses (not to exceed a total of 12 inches maximum) of sewer brick shall be used to meet existing grade. Seating surfaces shall be machined.

Slab type manhole frames and covers shall be as required by the standard BWPCA details.

All covers shall be cast with the identifying letters as approved. Letters shall be 2 inches high and embossed against a recessed background.

Manhole ladder rungs shall be set 12 inch on centers. Rungs of fiberglass coated steel may be approved by the Authority's Engineer upon submission of satisfactory technical information.

**A-3.0 PUMP STATIONS: DESIGN REQUIREMENTS APPLICABLE TO EXPANSION PERMITS AND TO COMMUNITY SEWERAGE SYSTEMS**

**GENERAL INFORMATION:**

1. Average Flow Rate - Based on 350 gpd. per equivalent single family connection, or 100 gal./cap./day.
2. Peak Flow Rate - Use chart below:

<u>AVG. Flow</u>	<u>Peak Flow</u>	
<u>(mgd)</u>	<u>(mgd)</u>	<u>(gpm)</u>
0.01	0.072	50
0.03	0.190	130
0.05	0.288	200
0.07	0,376	260
0.09	0.460	320
0.11	0.54	370
0.13	0.62	430
0.15	0.69	480

3. Number of Pumps - 2 pumps, each sized for peak flow OR 3 equally sized pumps, any combination of two is capable of pumping peak flow. One spare pump shall be provided and stored at each pump station readily available to replace a failed pump.

4. Miscellaneous - Structures must be sized adequately for maintenance, and for future service areas and future equipment needs. These specifications are minimum requirements and additional criteria may be imposed at specific sites.

**PUMPING STATION CRITERIA**

		<b>Peak Flow of 150 gpm or less</b>	<b>Peak flow over 150 gpm to 500 gpm*</b>
1	<u>Location of Pumps</u>	Wet pit	
2	<u>Priming of Pumps</u>	Self priming	
3	<u>Type of Pumps</u>	Non clog sewage pumps	Non clog sewage pumps, capable of passing 3" sphere
4	<u>Removal of pumps - for routine maintenance replacement</u>	Floor hatch, chain lift and pipe guides required	Floor hatch, chain lift, and pipe guides required
5	<u>Access</u>	Imbedded aluminum rungs, or fiberglass coated steel	Varies per depth and pump station
6	<u>Minimum pump suction and discharge size</u>	4"	4"
7	<u>Screens</u> (provide means of cleaning)	Grinder, muffin monster or equivalent, if required	Alum. bars @ 1-1/2" spacing, Grinder, muffin monster or equivalent
8	<u>Sample Manufacturers</u> (to set acceptable standards)	Flygt, Gould	Flygt, Goulds, Morris Machine
9	<u>Motors - Location</u>	Submersible, mounted on pump	Above potential flood level, or use drywell submersibles
10	<u>Emergency Power</u>		
	a) Generator Location	In enclosure or building on the site	In superstructure

	b) Power requirements	Power at peak flow to start and operate lead pump.	Power at peak flow for pumping, lighting heat & ventilation
	c) Typical manufacturers	Onan	Caterpillar, or Onan
11	<u>Other Electrical Requirements</u>		
	a) Emergency transfer switch	Required	Required
	b) Pump alternator - to alternate lead & lag pumps	Required	Required
	c) Electrical cabinets	NEMA 4 (if not in heated super structure) NEMA 1 (if in heated super structure)	NEMA 1 (super-structure))
	d) Lighting	Required on wet well exterior; light facing towards wet well	Required throughout
	e) Power	3 Phase (single only in special cases as approved)	3 Phase
12	<u>Pump Intake</u>	On pump	Sep. flared intakes
13	<u>Level Controls (equal product of the Auto Corp)</u>	Transponder with float backup at high level	Transponder with float backup at high level. Five floats required.
14	<u>Valves - Shut-off valves check valves (weight loaded)</u>	Discharge only Horiz. (except special cases as approved)	Shutoff valves should be placed on the discharge line of each pump. A check valve should be placed on a horizontal section of each discharge line between the pump and shutoff valve.
15	<u>Wet Wells - Capacity based on pump operation</u>	Max. 6 starts per hr. Max. Vol. = 10 min. @ avg. flow	Max. 6 starts per hr. Max. Vol.= 10 min @ avg. flow
16	<u>Ventilation</u>		
	Wet well	15 changes per hr.	15 changes per hr.
	Dry well	N/A	6 changes per hr.

	Superstructure and Dry well	N/A	Elec. unit heaters
17	<u>Water Supply</u> - for flushing and cleaning	Required on exterior	Required exterior and interior of pump house
18	<u>Force Mains</u> – Min. velocity 2 fps at peak flow, air relief valves at high points, termination 2 ft above flow line.		At average pumping rate, velocity in excess of 3 feet per second should be maintained.
19	<u>Force Mains</u> – At all horizontal or vertical bends greater than 11-1/4 deg.	Concrete thrust block design	Concrete thrust block design
20	<u>Structure</u>		
	a) Substructure	Reinf. Concrete	Reinf. concrete
	b) Superstructure	Optional	Masonry
21	<u>Alarms</u> – Including low/high water, power failure, seal failure	On-site, audio visual and transmitted to central point	On-site, audio visual and transmitted to central point
22	<u>Spare Parts</u>	Replacement pump unit (complete) Compressor Spare starters Float switches  Other parts as recommended by manufacturer	1 set of rings Wear plate Shaft sleeve, Shims, 1 impeller assembly 2 sets bearings, seals, Grease retainers 30 packing sets Compressor Spare Starters Float switches Other parts as recommended by manufacturer
23	<u>Service</u> – startup to include 2-day instruction program for station operator. Annual service req'd. with approved pump service organization.	At least monthly inspection by maintenance man, plus semi-annual inspection by approved pump service organization.	At least monthly inspection by maintenance man, plus semi-annual inspection by approved pump service organization.
24	<u>Variable Frequency Drives</u>	As required	VFDs required
* Over 500 gpm capacity, special criteria to be provided.			

## **Section A-4.0 COMMUNITY SEWERAGE SYSTEM – INSPECTION AND MAINTENANCE REQUIREMENTS**

Inspections and Maintenance: All community sewerage systems shall be maintained in proper working and operating condition by the property owner and as may specially be required by the Authority. For systems with pump stations, the property owner shall provide for the regular cleaning of wet wells to eliminate odors; the protection and cleaning of float switches from grease and debris; the inspection, and if necessary, the repair, of all electrical equipment, including alarms, by a licensed electrician at least once every two years; and the removal and inspection of the pump(s) at least once a year for wear and seal leakage, and the repair thereof as necessary. Pump station operation and performance, discharge pump rates and pump speed, and pump suction and discharge pressures shall be evaluated as part of the annual pump station inspection. Force mains shall be inspected at least once every two years to ensure normal function and to identify potential problems. Special attention should be given to the integrity of the force main surface and pipeline connections, unusual noise, vibration, pipe and pipe joint leakage and displacement. Where the force main discharges to a sewer manhole, inspection of the manhole for potential manhole erosion shall be made. For gravity systems and for gravity sewer components, the property owner shall provide at a minimum for the routine inspection (by appropriate means) of all system components (pipes and manholes) and operations at least once every two years to a) identify defects in the system that may contribute to or cause pollution, infiltration or system failure; and b) identify maintenance, rehabilitation and replacement tasks and requirements for planning and budgetary purposes. Each community sewerage system shall be operated and maintained in accordance with each private maintenance agreement. A written record of all inspection activity and findings shall be maintained by the owner **and provided to the Authority on not less than an annual basis.**

All work involving the repair or replacement of sewer pipe, force main, manholes and pump station equipment shall conform to the requirements of the Sewer Use Rules and Regulations. Prior to performing any such work, the property owner or contractor shall give the Authority notice of same and shall apply for and receive any necessary permits. Authority personnel shall have the right to inspect all such work during and after execution for compliance with the requirements of these Sewer Use Rules and Regulations.

**Section A-5.0 AS-BUILT DRAWINGS.** **As-Built Drawings** are those drawings prepared by a Connecticut licensed land surveyor on behalf of the applicant or his contractor as the project is constructed and upon which the actual locations of all sewer and site plan components and underground conditions are recorded. The applicant is responsible for providing the As-Built Drawings from field data collected during the course of construction of the project. Field data is defined as information collected on site while constructing the project that is not available from the contract drawings. It is of importance that the As-Built Drawings record all field information relating to concealed conditions.

The As-Built Drawings shall depict the final grade, the location & inverts of all above and below grade sewer structures, including but not limited to manholes, sewer line pipe materials, diameter, length and slope, tanks, grease traps, clean outs, connections, appurtenances, additional underground structures and/or utilities found or located during construction, and all items depicted on the approved construction plans. The As-Built Drawings shall be prepared by a State of Connecticut licensed land surveyor and shall be provided via email to the BWPCA and Authority's Consulting Engineer for review prior to acceptance. Once deemed acceptable, one (1) digital copy in AutoCad (.dwg) format, along with a PDF copy of the final as-built, shall be submitted to the Authority's Consulting Engineer. The Autocad (.dwg) shall be geolocated utilizing the North American Datum of 1983, Connecticut State Plane Feet (NAD83) coordinates, or have two clearly labeled reference points with coordinates in NAD83 format. Two hard copies shall be submitted to the BWPCA. Additional copies may be required on an as needed basis. If only hard copies are supplied, two clearly labeled reference points with coordinates in NAD83 format shall be visible. The as-built requirement can be waived at the discretion of the BWPCA on a case-by-case basis.

## APPENDIX

Excerpts from Connecticut Public Health Code, On-Site Sewage Disposal Regulations and Technical Standards for Subsurface Sewage Disposal Systems, January 1, 2023, Tables 1, Tables 2, 2-A, and 2-B

**Adopted: April 6, 1976**

**Amended 4/27/76, 7/29/76, 9/15/76, 6/24/87, 6/22/94, 3/22/01, 9/29/10, 1/11/12, 1/23/13, 6/26/13, 8/27/14, 3/22/17, 1/23/19, 2/26/20, 6/24/20, 10/28/20, 12/15/21, 10/26/22, 4/26/23, 4/24/24, 5/22/24, 6/26/24**



**Table 1**  
Separating distances are based on horizontal measurements except for non-vertical closed loop geothermal system bore holes that are from the closest point of the bore hole. Reference to sewage tank in Table 1 includes septic tank, grease interceptor tank, pump chamber, and sewage holding tank.

Item	Separating Distance (feet)	Special Provisions
A. Water supply well (potable, open loop geothermal, irrigation, spring) with a required withdrawal rate in gallons per minute (GPM): < 10 GPM 10 to 50 GPM > 50 GPM	75 150 200	Distance from a water supply well to a leaching system shall be doubled if the receiving soil percolation rate is faster than 1.0 minute per inch and the bottom of the leaching system is less than 8 feet above ledge rock.
B. Building served	10	See Item G for buildings with groundwater control drains.
C. Open watercourse	50	For lots in existence prior to 8/16/82 that are not on a public water supply watershed, the distance shall be reduced to not less than 25 feet.  In coastal areas, the Coastal Jurisdiction Line shall be considered the open watercourse limit, unless site specific information on high tide elevations on a property establishes the open watercourse limit.
D. Public water supply reservoir	100	Distance to tight pipe (See Table 3) shall be reduced to 5 feet if the pipe excavation is not backfilled with free draining material (FDM).
E. Solid piping for the conveyance of surface or groundwater drainage	25	Distance to sewage tank shall be reduced to 10 feet if storm water structure is watertight and constructed with rubber joint seals and watertight pipe connection seals (e.g., ASTM C 923). Storm water structures shall not be designed to collect groundwater (See Item G).
F. Storm water structure (e.g., catch basins, manholes)	25	No drain shall be constructed near a sewage system for the purpose of collecting partly treated sewage regardless of the distance. 1. Distance to sewage tank shall be reduced to 25 feet if tank is verified to be watertight.
G. Groundwater drain (e.g., curtain, foundation, sumps) Up-gradient or on sides Down-gradient	25 50 <sup>(1)</sup>	Distance shall be reduced to 25 feet to sewage tank. 1. Distance shall be reduced to 25 feet to a leaching system if MLS is not applicable or the SWIS is not up-gradient or down-gradient. Distances may be further reduced to 10 feet for minor SWIS (e.g., rain gardens) with the approval from the DOH if demonstrated that the leaching system or sewage tank shall not be adversely impacted. 2. Distance shall be reduced to 50 feet to a leaching system if MLS is not applicable or the SWIS is not up-gradient or down-gradient, or with the approval from the DOH if demonstrated that the leaching system shall not be adversely impacted. Distances may be further reduced to 25 feet for minor SWIS (e.g., rain gardens) with the approval from the DOH if demonstrated that the leaching system shall not be adversely impacted. 3. The DOH may require increased distances or an engineered assessment on the operation of the leaching system if localized groundwater mounding is a concern.
H. Storm water infiltration system (SWIS)  Single-family residential building lots  Other lots (e.g., commercial, multi-family)	50 <sup>(1)</sup>  75 <sup>(2)(3)</sup>	

L. Top of embankment (i.e., fill package around perimeter of leaching system)	10	See Figure 13. Distance does not apply to sewage tank.
J. Property line  Up-gradient and on sides  Down-gradient	15 <sup>(1)</sup>  25 <sup>(2)</sup>	1. Distance to sewage tank and reserve leaching area shall be reduced to 10 feet. 2. Distance shall be reduced to 10 feet if the top of the leaching system is below original grade, grading rights from affected property owner are secured, or retaining walls are utilized (See Section VIII A for retaining wall provisions). 3. Separating distance between the leaching system and down-gradient property line shall be reduced to 15 feet if MLSS is not applicable or on flat groundwater table lots; further reduction may be allowed as cited in footnote 1 if either condition exists.
K. Water Piping Pressure (e.g., potable, irrigation) Water supply suction	10 <sup>(1)</sup> 75 <sup>(2)</sup>	1. Water line trench excavations less than 25 feet from leaching system shall not be backfilled with FDM. 2. Distance between water suction pipe and sewage tank shall be reduced to 25 feet if tank is verified to be watertight.
L. Below ground swimming pool	25	See Item G for down-gradient pools with groundwater control drains.
M. Above ground swimming pool	10	Includes hot tubs (except on decks).
N. Accessory structure	10	Distance to structure without full-wall, frost protected footings shall be reduced to 5 feet. See Item G if drains provided.
O. Utility service trench (e.g., electric, gas)	5	Utility trench excavations less than 25 feet from leaching system shall not be backfilled with FDM. It is recommended that detectable underground magnetic tracer / warning tape be provided at least 1 foot above buried utility lines within 25 feet of a SSDS. Distance does not apply to electrical and alarm connections to sewage tanks.
P. Buried fuel tanks	25	Distance to sewage tank shall be reduced to 10 feet. Distance to leaching system shall be reduced to 10 feet if not down-gradient of leaching system. See Item G if drains provided.
Q. Water treatment wastewater (WTW) dispersal system Small discharge (<150 GPD) Med. discharge (150 – 500 GPD) Large discharge (>500 GPD)	25 <sup>(1)</sup> 50 <sup>(2)</sup> 75 <sup>(3)</sup>	Distance to sewage tank shall be reduced to 10 feet. Distance to WTW dispersal system non-discharging settling or filtration structures and solid piping shall be reduced to 10 feet; however solid piping excavations shall not be backfilled with FDM. 1. Distance to leaching system shall be reduced to 10 feet if MLSS is not applicable or the WTW dispersal system does not discharge up-gradient or down-gradient of the leaching system. 2. Distance to leaching system shall be reduced to 25 feet if MLSS is not applicable or the WTW dispersal system does not discharge up-gradient or down-gradient of the leaching system. 3. The DOH may require an increased distance or an engineered assessment on the impacts of localized groundwater mounding in the vicinity of a SSDS.
R. Closed loop geothermal system Bore hole, Trench	25	
Geothermal piping to Borehole/Trench	5	Geothermal piping excavations less than 25 feet from leaching system shall not be backfilled with FDM.
S. Grade cuts or soil disturbance down-gradient of leaching system	50	A soil cut within 50 feet down-gradient of a leaching system shall not be allowed if bleed-out from cut is a concern. Distance may be reduced with the approval of the DOH if it is demonstrated the cut/soil disturbance preserves the leaching system's receiving soil (See MLSS Appendix A).

**Table 2**  
**Approved Building Sewer Pipe from Building Served to Septic Tank or Grease Interceptor Tank**

NOTE: The DOH shall inspect all building sewer piping and joints prior to covering

USE	PIPE DESCRIPTION	ACCEPTABLE JOINT	REMARKS
<p>Building sewer from foundation wall to septic tank or grease interceptor tank.</p> <p>Building sewer within the sanitary radius of a water supply well, but no closer than the following minimum distances based on withdrawal rates:</p> <p>&lt;10 gpm: 25 feet                      10 – 50 gpm: 75 feet                      &gt;50 gpm: 100 feet</p> <p>Building sewers no less than 25 feet from a water suction pipe.</p>	<p><del>Cast iron hubless</del> <del>ASTM A 888</del></p>	<p>Cast iron split sleeve bolted joint with rubber gasket, MG Coupling or equal</p> <p>OR</p> <p>3” wide, heavy-duty, stainless steel banded coupling with rubber gasket; Clamp-All, ANACO SD 4000 Coupling, or equal</p>	<p>Roll-on “donut type” gaskets not acceptable if connection is within 25 feet of foundation wall. Pipe shall be properly bedded, laid in straight line on uniform grade</p> <p>Couplings without shear bands can be used for joint connections between cast iron pipe and the bell end of an approved PVC Schedule 40 or 80 pipe</p>
<p>Building sewers and pressurized water lines shall be installed in accordance with Section III D.</p>	<p><del>Cast iron bell and spigot</del>  <del>ASTM A 74</del></p>	<p>Rubber compression gaskets</p>	<p>Stainless steel 3” wide shear band coupling required for connection of dissimilar piping materials</p>
<p>Building sewers shall be kept a minimum of 10 feet from closed loop geothermal bore holes and trenches.</p> <p>There are no minimum distances between building sewers and other items listed in Table 1. However, items placed near building sewers shall not damage or compromise the integrity of the pipe.</p> <p>Building sewers and water piping shall be installed in accordance with Section III D.</p>	<p>PVC Schedule 40 or 80, ASTM D 1785 or ASTM D 2665</p>	<p>Rubber compression gasket couplings, Harco Mfg., ASTM D 3139 or equal*                      OR                      Solvent weld couplings/ fittings using proper two step PVC solvent solution procedure</p> <p>Gripper Gasket LLC Maxadaptor Sewer Repair Coupling</p>	<p>*Use of 3” wide approved stainless steel banded couplings on PVC, ASTM D 1785 or 2665 is acceptable for 4” diameter pipe. Use of 4” wide approved stainless-steel couplings are required for 6” and 8” pipe.</p> <p>UL (gray) Piping – Schedule 40 or 80- 36” min. radius sweep piping (90°) may be utilized without a cleanout.</p>
<p><del>Definition: ANSI A 21.51</del></p>	<p>PVC AWWA C900 (PC 150 psi min.)</p>	<p>Rubber compression gaskets</p>	<p>ABS Schedule 40 is not acceptable</p>
<p>PVC ASTM F 1760, Schedule 40</p>	<p>Rubber compression gaskets</p>	<p>Rubber compression gaskets</p>	<p>Connection to cast iron building sewer shall be made with compression gaskets.</p> <p>“O”-ring gasket is not acceptable</p> <p>Only 4” pipe approved</p> <p>Minimum 1’ cover in vehicular loaded traffic areas</p>

**Table 2-A**  
**Approved Effluent Distribution Pipe**

USE	PIPE DESCRIPTION	TYPE OF JOINT	REMARKS
Solid and perforated effluent distribution pipe used after the septic tank. Solid non-metal piping listed in Table 2 may also be utilized as effluent distribution piping, and shall be allowed at the below distances to wells, drains, etc.	*PVC ASTM D 3034, SDR 35 *PVC ASTM F 789, PS-46 *PVC ASTM F 891, PS-50 or PS-100 *PVC ASTM F1760, SDR35	*Rubber compression gasket, or solvent weld couplings/fitings w/ 2-step PVC solvent solution procedure.  Bell and spigot with no gasket	Heavy duty plastic pipe for shallow pipe installation   4" diameter pipes can be used but shall be bedded in 6" min. of approved aggregate and covered with 2" min. of aggregate or with other special bedding requirements to protect against crushing
*Solid distribution pipe within the sanitary radius of a water supply well, but no closer than the following minimum distances based on withdrawal rates: <10 gpm: 25 feet 10 – 50 gpm: 75 feet >50 gpm: 100 feet	PVC ASTM D 2729 - only 3" diameter pipe (see remarks for use of 4" pipe)	Bell and spigot, no gaskets	4" diameter corrugated smooth interior wall polyethylene leaching
*Solid distribution pipe no less than 25 feet from a water suction pipe.  *Solid distribution piping within 25 feet of an open watercourse, or surface or groundwater drain (curtain/foundation).  *Solid distribution pipe and pressurized water lines shall be installed in accordance with Section III D.  *Solid distribution pipe should be kept a minimum of 10 feet from closed loop geothermal bore holes and trenches.	PE ASTM F 810 (Perf. Spec.), SDR 38/ ASTM D 3350 - only 3" diameter pipe (see remarks for use of 4" pipe)	Bell and spigot, no gaskets	pipe meeting ASTM D 3350 and performance specification ASTM F 405 may be used without bedding
There are no minimum distances between solid distribution pipe and other items listed in Table 1. However, items placed near distribution piping shall not damage or compromise the integrity of the pipe.  Solid effluent distribution piping and water piping shall be installed in accordance with Section III D	PE corrugated rigid pipe: ASTM 1248 (coil pipe not acceptable) - only 3" diameter pipe (see remarks for use of 4" pipe)  *PE ADS N-12, ASTM F 667, AASHTO M-294	Sleeve joints  *Series 35 ADS coupling, o-ring gasket or WT Pipe/joint (Gasketed bell/spigot) Snap on sleeve joint	*Coupling: ASTM D 3034/F 1336, Joints (Coupling and WT) meet ASTM D 3212

**Table 2-B  
Approved Force Main (Pressure) Piping for Specific Applications**

USE	PIPE DESCRIPTION	ACCEPTABLE JOINT	REMARKS
<p>Force main piping within the sanitary radius of a water supply well, but no closer than the following minimum distances based on withdrawal rates:                      &lt;10 gpm: 25 feet                      10 – 50 gpm: 75 feet                      &gt;50 gpm: 100 feet</p> <p>Force main piping no less than 25 feet from a water suction pipe.</p>	<p>PVC pressure pipe ASTM D 2241: SDR 21, 17, or 13.5</p>	<p>Bell and spigot with compression rubber gaskets</p>	
<p>Force main piping within 25 feet of an open watercourse, surface or groundwater drains (curtain/foundation).</p>	<p>PVC pressure water pipe AWWA C900 (PC 150 psi minimum)</p>		
<p>Force mains and pressurized water lines shall be installed in accordance with Section III D.</p>	<p>PVC ASTM D 1785 / ASTM D 2665, Schedule 40 or Schedule 80</p>	<p>Solvent welded, threaded joints or gasketed couplings</p>	
<p>Force mains should be kept a minimum of 10 feet from closed loop geothermal bore holes and trenches.</p>	<p>PE ASTM D 2239 PE ASTM D 2737</p>	<p>No joints within 75 ft. of well or 25 ft. of open watercourse, ground or surface water drains</p>	<p>Pipe available in 100-ft. and longer coiled lengths</p>
<p>There are no minimum distances between force mains and other items listed in Table I. However, items placed near force mains shall not damage or compromise the integrity of the pipe.</p>	<p>PE ASTM D 3035, SDR 11 or lower</p>	<p>No joints, Heat butt fused connections ok</p>	
<p>Force main piping and water piping shall be installed in accordance with Section III D.</p>			