WATER POLLUTION CONTROL AUTHORITY

REGULATIONS FOR THE INSTALLATION AND CONNECTION

OF BUILDING SEWERS AND FOR THE USE OF PUBLIC SEWERS

IN THE

CITY OF DERBY – CONNECTICUT

Effective Date: July 1, 2012
TABLE OF CONTENTS

Section A - Purpose and Authority
Section B – Definitions
Section C – Drainlayers
Section D – Permits and Inspection
Section E – Annual Sewer Charges
Section F – Building Sewers, Connections and Connection/Impact Fees
Section G – Materials and Workmanship
Section H – Use of Public Sewers
Section I – Protection from Damage
Section J – Powers and Authority of Inspectors
Section K – Penalties and Enforcement
Section L – Sewer Line Breaks and Blockages
Section M – Sewer Assessment Policy
Section N – Validity

Figure 1 – Building Sewers

Appendix A – Sewer Use Fees and Administrative Documents
Appendix B – General WPCA Sewerage System Details
Section A

Purpose and Authority

1. Purpose

The purpose of this regulation is to better manage land alteration and development in order to protect, maintain, and enhance the public health, safety, and general welfare of the citizens of the City of Derby by establishing minimum requirements and procedures for the Installation and Connection of Building Sewers and for the Use of Public Sewers.

2. Authority

These regulations are adopted in accordance with the General Laws of the State of Connecticut. The City of Derby herein prescribes the following Regulations for the Installation and Connection of Building Sewers and for the Use of Public Sewers.

3. Responsibility for Administration

The Water Pollution Control Authority of the City of Derby shall be the Permitting Authority/Authorized Enforcement Authority and shall administer, implement and enforce these regulations. Any powers granted to or duties imposed upon the Water Pollution Control Authority to promulgate such rules and regulations shall not have the effect of suspending or invalidating these regulations.

4. Applicability

No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public or private sewer appurtenance thereof without first obtaining approval of a permit for said connection, extension, repair, or disconnection of a sewer as appropriate.

Every person who directly or indirectly discharges wastewater to the sewer system shall ensure that such discharge complies with these regulations and any and all applicable State and Federal Regulations.
Section B

Definitions

Unless the context specifically indicates otherwise, the meaning of terms used in this ordinance shall be as follows:

1. "Abutting” shall mean land which fronts on a public sewer.

2. "Applicant" shall mean the owner as hereinafter defined who makes out a building sewer permit application with the intention of providing sewer to an improved property.

3. “ANSI” shall mean the American National Standards Institute.

4. “ASCE” shall mean the American Society of Civil Engineers.

5. "ASTM" shall mean the American Society of Testing & Materials.

6. "Average Daily Flow" or "ADF" shall mean the quantity of flow as calculated on a twelve month basis or put forth in Table 4 of the Connecticut Public Health Code for the estimation of wastewater flows, and all amendments/updates there to.

7. “Betterment Fixed Fee” shall mean a lump sum betterment fee for a public sewer extension paid for by the WPCA. The fee shall cover all of the costs associated with the sewer extension and shall be divided between each of the properties to be sewered as part of the project. The lump sum amount shall be individually calculated for each property.

8. “Board of Health” shall mean the Naugatuck Valley Health District, which provides the public health services to the residents of the City of Derby.

9. "BOD" (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures, five (5) days at 20° centigrade expressed in terms of mass and volume (milligrams per liter (mg/l)).

10. "Building Drain" shall mean that part of the lowest horizontal piping of a drainage system, 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 ten (10) feet outside the outer face of the building wall.
11. "Building Sewer" shall mean the extension from the building plumbing drain to the public sewer or other place of disposal.

12. "Categorical Pretreatment Standard or Categorical Standard" shall mean any regulation containing pollutant discharge limits promulgated by EPA in accordance with sections 307(b) and (c) of the Act (33 U.S.C. § 1317) which applies to a specific category of users and which appear in 40 CFR Chapter I, Subchapter N, Parts 405-471.


14. "City of Derby" shall mean the City of Derby, Connecticut.

15. "Clean Water Act" or "the Clean Water Act" shall mean the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended (33 U.S.C. § 1251, et seq.).

16. "COD" (denoting Chemical Oxygen Demand) shall mean the quantity of oxygen utilized in the chemical oxidation of organic compounds under standard laboratory procedures, expressed in terms of mass and volume (milligrams per liter (mg/l)).

17. "Combined Sewer" shall mean a sewer receiving both surface runoff and sewage.

18. "Cooling Water" shall mean the water discharged from any use, such as air-conditioning, cooling or refrigeration, during which the only pollutant added to the water, is heat.

19. “Developed Lots” or “Developed Building Lots” shall mean a property which has been developed to include a minimum of one residential/commercial/industrial structure per lot.

20. "Domestic Wastes" shall mean liquid wastes (1) from the non-commercial preparation, cooking and handling of food or (2) containing human excrement and similar matter from the sanitary conveniences of dwellings, commercial buildings, industrial facilities, and institutions.

21. "Domestic Wastewater" shall mean normal water-carried household and toilet wastes discharged from any improved property, excluding ground surface, and/or storm water.

22. "Easement" shall mean an acquired legal right for the specific use of land owned by others.
23. “EDU” shall mean equivalent dwelling unit.

24. "EPA" shall mean the U.S. Environmental Protection Agency or, where appropriate, the Regional Water Management Division Director, or other duly authorized official of said agency.

25. "Excessive" shall mean amounts or concentrations of any constituent of a wastewater which in the judgment of the Superintendent will cause damage to the wastewater treatment facilities, which will be produced in significant quantities in the sludge produced at the wastewater treatment facility, which will be harmful to a wastewater treatment process, which cannot be removed in the wastewater treatment facilities of the City of Derby to the degree required to meet the limited stream classification standard of the receiving water, which can otherwise endanger life, limb, the environment or public property, or which can constitute a nuisance.

26. "Facilities" shall include structures and conduits for the purpose of collecting, treating, neutralizing, or disposing of domestic wastewater and/or industrial or other wastewaters that are disposed of by means of structures and conduits including treatment and disposal works, necessary intercepting, outfall, and outlet sewers, and pumping stations integral to such facilities with sewers, equipment, furnishings thereof and other appurtenances connected therewith.

27. “Flat Fee” shall mean the portion of the annual sewer fees that include the annual base for connection to the sanitary sewer system. The annual base fee is used to offset a portion of the annual fixed costs such as operations and maintenance of the system, interest on capital projects, funding for capital projects, etc.

28. "Garbage" shall mean the animal and vegetable wastes resulting from the handling, preparation, cooking and serving of food and from the handling, storage and sale of produce. It is composed largely of putrescible organic matter and its natural moisture content.

29. “Illegal Connection” shall mean a connection to the sanitary sewer from which non-sewer wastes such as surface run off or rain water enter the sanitary sewer system. Illegal connections include some of the follow connections such as roof leaders, floor drains, sump pumps, yard drains, catch basins and storm sewers connected to the sanitary sewer, etc.

30. "Improved Property" shall mean any property located within the City of Derby upon which there is erected a structure intended for continuous or periodic habitation, occupancy, or use by human beings or animals and from which structure domestic wastewater and/or industrial wastes shall be or may be discharged.
31. "Industrial Establishment" shall mean any room, group of rooms, building or other enclosure used or intended for use in the operation of one (1) business enterprise for manufacturing, processing, cleaning, lauding, assembling or preparing any product, commodity or article or from which any process waste, as distinct from domestic wastewater, may be discharged.

32. "Industrial User" shall mean a manufacturing, processing, or other non-residential facilities, such as hospitals, commercial laundries, and tank and barrel cleaning operations, which discharges non-sanitary industrial wastes into a public sewer.

33. "Industrial Wastes" shall mean the liquid or solid wastes from industrial processes, trade, or business, as distinct from sanitary sewage.

34. "Industrial Wastewater" shall mean the liquid wastes resulting from the processes employed in industrial, manufacturing, trade or business establishments.

35. “Interest Rate” shall equal 1.5% per month; 18% per annum or the maximum value as modified by State of Connecticut – State Statutes.

36. "Interference" shall mean a discharge which alone or in conjunction with a discharge(s) from other sources, both:

   A. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal;

   B. Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (including Title II, the Resource Conservation and Recovery Act), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act and the Marine Protection, Research and Sanctuaries Act.

37. "Invert" shall mean the bottom inside of the sewer pipe.

38. "mg/l" shall mean milligrams per liter.

39. "National Pollutant Discharge Elimination System (NPDES) Permit" shall mean the program for issuing, conditioning and denying permits for the discharge of
pollutants from sources into the waters of the United States, the contiguous zone, and the oceans pursuant to Section 402 of the Clean Water Act (33 U.S.C. 1342).

40. "National Pretreatment Standard" or "Pretreatment Standard" shall mean any regulation containing pollutant discharge limits promulgated by the U.S. Environmental Protection Agency in accordance with Section 307 (b) and (c) of the Clean Water Act which applies to industrial users (IUs), including the specific prohibitions found in 40 CFR 403.5.

41. "Natural Outlet" shall mean any outlet into a watercourse, pond, ditch, lake, or other body or surface or groundwater.

42. “NH₃” shall mean Ammonia Nitrogen measured under standard laboratory procedures, expressed in terms of mass and volume (milligrams per liter (mg/l)).

43. “OSHA” shall mean the Occupational Safety & Health Administration as administered through the United States Department of Labor.

44. "Owner" shall mean any person vested with ownership, legal or equitable, sole or partial, of any improved property.

45. "Pass Through" means a discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

46. "Person" shall mean any individual, firm, company, partnership, corporation, association, group or society and includes the State, and agencies, districts, commissions and political subdivisions created by or pursuant to State Law.

47. "pH" shall mean a measure of the acidity or alkalinity of a solution, expressed in standard units.

48. "Pollutant" shall mean any material or substance that may cause an alteration of the chemical, physical, biological or radiological integrity of the POTW or its receiving waters.

49. "POTW (Publicly Owned Treatment Works)” shall mean the treatment works operated by the City of Derby and its agents, including any devices and systems, whether owned by the City of Derby or under its control, used in the collection, storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature and also including without limiting the generality of the foregoing, the City of Derby’s Wastewater Treatment Facilities and
appurtenances, the sewers, pipes, pumping stations and other devices conveying wastewater to the treatment facilities, and sludge processing systems whether operated by the City of Derby directly or by a contractor or agent of the City of Derby.

50. "Pretreatment or Treatment" shall mean 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 POTW. The reduction or alteration can be obtained by physical, chemical or biological processes, or process changes, or by other means, except as prohibited by 40 CFR Section 403.6(d).

51. "Pretreatment Requirements" shall mean any Federal, State or Local substantive or procedural requirement related to pretreatment, other than a National Pretreatment Standard imposed on a user.

52. "Pretreatment Standards" shall mean all applicable federal rules and regulations implementing Section 307 of the Clean Water Act, as well as any non-conflicting state of local standards.

53. "Property", "Parcel", or "Lot" shall mean an area of land as marked on the assessment maps and/or drawings in the office of the Assessor, City of Derby, Connecticut.

54. "Public Sewer" shall mean a sewer, in which all owners of abutting properties have equal rights, and is controlled and maintained by the City of Derby.

55. "Receiving Waters" shall mean any watercourse, river, pond, ditch, lake, aquifer, or other body of surface or ground water receiving discharge of wastewaters.

56. "Receiving Water Quality Standards" shall mean the Connecticut Water Quality Standards, as put forth by the State of Connecticut.

57. "Sanitary Sewer" shall mean a sewer, which carries sewage, and to which storm, surface, and ground waters are not intentionally admitted.

58. "Sewage" shall mean a combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments, together with such ground, surface, and storm waters as may be present.

59. "Sewage Treatment Plant" shall mean any arrangement of devices and structures used for treating sewage.
60. "Sewage Works" shall mean all facilities for collecting, pumping, treating, and disposing of sewage.

61. "Sewer Connector" shall mean the extension from the building drain to the public sewer.

62. “Sewer Connection Permit” shall mean a permit required for a private owner to make a connection to the publicly owned sewer.

63. "Sewer Main" shall mean a sewer constructed of adequate diameter, slope, and material having the capability, in the opinion of the WPCA, to function as a public sewer.

64. “Sewer Use” shall mean the amount of wastewater generated by a property on a daily basis by the said for conveyance and treatment by the WPCF. This amount of wastewater generated may be used to calculate the sewer fees due for the said property.

65. "Shall" is mandatory; "May" is permissive.

66. "Slugs” shall mean any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge.

67. "Spill" shall mean the release, accidental or otherwise, of any material not normally released to the facilities, which by virtue of its volume, concentration, or physical or chemical characteristics, creates a hazard to the facilities, their operation or their personnel. Such characteristics shall include, but are not limited to, volatile, explosive toxic, or otherwise unacceptable materials.

68. "Storm Drain" or "Storm Sewer" shall mean a sewer, which carries storm and surface waters and drainage, but excludes sewage and industrial wastes, other than unpolluted cooling water.

69. "Storm water" shall mean any flow occurring during or immediately following any form of natural precipitation and resulting there from.

70. "Superintendent" shall mean the Superintendent of the City of Derby WPCF, or his authorized deputy, agent, or representative.

71. "Suspended Solids (SS or TSS)” shall mean solids that either float on the surface of, or are in suspension in water, sewage, or other liquids, and which are not removable by laboratory filtering, and are categorized as non-filterable residue in by the EPA.
72. "TKN" shall mean Total Kjeldahl Nitrogen which is the sum of Organic Nitrogen and Ammonia Nitrogen measured under standard laboratory procedures, expressed in terms of mass and volume (milligrams per liter (mg/l)).

73. "Toxic Pollutant" shall mean a pollutant or combination of pollutants listed as toxic in regulations promulgated by the EPA.

74. "TP" shall mean Total Phosphorous, which is the sum of the organic, and inorganic forms of phosphorus measured under standard laboratory procedures, expressed in terms of mass and volume (milligrams per liter (mg/l)).

75. "Unpolluted" shall mean not containing any pollutants limited or prohibited by the effluent standards in effect, or water whose discharge will not cause any violation of receiving water quality standards as put forth by the State of Connecticut.

76. "User" shall mean any person who contributes, causes, or permits the contribution of sewage into the public sewer or sewage works.

77. "Wastes" shall mean substances in liquid, solid, or gaseous form, which can be carried in water.

78. "Wastewater" shall mean the spent water of a community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, institutions, and industrial establishments, together with any groundwater, surface water, and storm water that may be present, whether treated or untreated, which is discharged into or permitted to enter the City of Derby's wastewater treatment system.

79. "Wastewater Treatment System (System)" shall mean any devices, facilities, structures, equipment, or works owned or used by the City of Derby for the purpose of the transmission, storage, treatment, recycling, and reclamation of industrial and domestic waste, or is used for the ultimate disposal of sludge resulting from such treatment.

80. “Wastewater Treatment Facility” shall mean any arrangement of devices and structures used for treating sewage

81. "Watercourses" shall mean a natural or artificial channel in which a flow of water occurs, either continuously or intermittently.

82. “WPCA” shall mean the Water Pollution Control Authority for the City of Derby.
83. “WPCA Office” or “Office of the WPCA” shall mean the office of the Water Pollution Control Authority for the City of Derby located within City Hall. The WPCA Office is located on the second floor of City Hall. The address of City Hall is 1 Elizabeth Street, Derby, CT 06418.

84. “WPCF” shall mean the City of Derby Water Pollution Control Facility or Wastewater Treatment Facility.

All other words and terms not otherwise defined herein shall be construed as having meaning defined in the Glossary: Water and Wastewater Control Engineering, published by the Joint Committee of American Public Health Association, ASCE, American Water Works Association, and Water Pollution Control Federation, or the latest edition of Standard Methods for the Examination of Water & Wastewater, published by the American Public Health Association as either may be amended from time to time, and, if undefined in either publication, by their general and common usage.
Section C

Drainlayers

1. No person shall lay or repair any building sewer, private sewer, or make any connection to any public sewer unless such person is duly licensed by the City of Derby to perform such work.

2. Licenses to perform such work as a drainlayer will be issued only to contractors, who in the opinion of the WPCA are sufficiently experienced and competent. Any person seeking said license shall file an application therefore on a form, which may be obtained from the WPCA at the WPCF. Licenses shall expire on the anniversary date thereof and must be renewed annually on or before their date of expiration. The annual drainlayer fee shall be as provided on Appendix A – Sanitary Sewer System Fees.

3. Every applicant who has been issued a drainlayer license shall submit a Certificate of Insurance in the sum of $200,000.00/$500,000.00 Broad Form General Public Liability including coverage for premises operations, independent contractors, as well as damage from explosion, by collapse of structures, and to underground pipes, utilities and structures and $200,000.00/$500,000.00 Property Damage Liability. Certificates of Insurance shall name the City of Derby as well as the WPCA as additional insured. In addition, a Certificate of Insurance of Workmen’s Compensation coverage shall be filed. All of the above Certificates shall remain in full force and effect for the period of the license granted hereunder and shall be renewed and new Certificates provided to the WPCA upon renewal of the drainlayers license. Said insurance shall provide that it shall save, defend, and indemnify the WPCA and the City of Derby against any and all claims, liability, loss, expense, action, or damage incurred by the City of Derby or the WPCA, including reasonable attorney’s fees, arising out of, as a result of, or in any way connected with the performance of the work of the licensee, and for or by reason of any acts or omission of said licensee in the performance of its work. The drainlayer shall comply with any and all applicable Local, State, and Federal codes, rules, and regulations.

4. No licensed drainlayer shall allow its name to be used by any other person, either for the purpose of obtaining permits, or doing any work under its license.

5. Any drainlayers license granted pursuant hereto shall be subject to immediate revocation or suspension upon determination by the WPCA of unsatisfactory performance or violation of any law, statute, code, or of these regulations.

6. By applying for said license, and/or holding or operating under said license, any drainlayer licensed hereunder agrees that he shall save, defend, indemnify, and
hold harmless the WPCA and the City of Derby against any and all claims, liability, loss, expense, action, or damage incurred by the City of Derby and/or the WPCA, including reasonable attorney’s fees, arising out of, as a result of, or in any way connected with the performance of the work of the licensee, and for or by reason of any acts or omission of said licensee in the performance of its work.
Section D
Permits and Inspection

1. Building Sewer Permit: No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the WPCA. Any person proposing a new discharge into the system or a substantial change in the volume or character of pollutants that are being discharged into the system shall notify the WPCA a minimum forty-five (45) days prior to the proposed change or connection, and shall be required to obtain a written permit as well as approval from the WPCA for said new connection or substantial change in discharge.

2. Industrial wastes and wastewaters shall be governed by the requirements outlined in section H of these regulations.

3. To obtain a Building Sewer Permit for either residential, commercial or industrial service, the owner or his agent shall make an application on the appropriate forms furnished by the WPCA. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the WPCA.

   A. Fees, in accordance with the schedule of fees set forth in Appendix A attached hereto, shall accompany each class of sewer permit application. All fees shall be paid in full at the time of application. The WPCA may revise the fees as required.

   B. Permits shall only be issued for plumbers licensed to do business in the State of Connecticut and to drain layers licensed to lay drains by the WPCA in the City of Derby. Permits shall be non-transferable.

   C. Permits shall be subject to revocation based upon violation by the permit holder of the rules and regulations contained herein, violation of the terms of the permit, or for any other reason deemed appropriate by the WPCA.

   D. A Building Sewer Permit shall expire 365 days after the date of issuance. If the work under the permit is not completed within 365 days, renewal of the permit shall be required and must be obtained prior to completion of the project. A Permit Renewal Processing Fee, in accordance with the schedule set forth in Appendix A, is required.

   E. Permits will not be issued until the applicant has filed a layout plan showing the location of the existing/proposed sewer service connection(s),
house location, and route of sewer service, and said layout has been approved by the WPCA or its approved agent and all connection and impact fees and any/all delinquent sewer fees as set forth in Appendix A have been paid in full.

F. Permits shall be obtained for repair work to existing sewer services. A Sewer Service Repair Permit Fee, in accordance with the schedule set forth in Appendix A, is required. Responsibility and liability for all repair work shall be the same as are herein imposed for original connections.

G. No permit shall be issued, except where deemed by the WPCA to be an emergency, to make an excavation in a public way until the applicant files with the WPCA copies of the notices to public utility companies as required by the Connecticut General Statutes. Applicant shall also comply with all applicable Local, State and Federal rules and regulations, regarding trench excavation and safety, where applicable.

H. By applying for, operating under, or holding any permit issued hereunder, said person agrees, grants and permits any WPCA employee and/or duly authorized representatives of the WPCA bearing proper credentials and identification the right to enter the subject property for the purposes of inspection, observation, measurement, sampling, testing, and investigations to the degree necessary to permit the evaluation for compliance with these regulations in accordance with the provisions of these regulations. The WPCA shall provide reasonable notice of any such request and, upon such request, access shall be granted in a timely manner.

4. The applicant for the Building Sewer Permit shall notify the Superintendent a minimum of 48 hours in advance when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the Superintendent or his representative. All connections must be inspected and approved prior to trench backfilling and compacting. All inspections shall be made during normal WPCA working hours. If a WPCA inspector or an authorized agent has to stay to inspect the job after 2:30 pm, he/she shall be paid time and one-half or double time on holidays. All inspectional costs shall be borne by the applicant in accordance with the appropriate fee schedule in Appendix A.

5. Sewer connection or extension permits shall not be issued to projects, which do not have all the necessary and required Local, State and Federal approval and permits, until the necessary approval and permits have been obtained. Additionally, permits shall not be issued for projects located in any part of City of Derby in which there is a moratorium upon sewer extensions or connections imposed by the appropriate City of Derby authority.
6. Alteration Permit: Any person may propose an extension, replacement, or relocation of a publicly owned sewer to serve a new or rehabilitated building or development. Any person who proposes to extend, replace, or relocate a publicly owned sewer shall prepare and submit for review and approval by the WPCA construction plans with an original stamp by a licensed Professional Engineer in the State of Connecticut, supplemented by such other permits, plans, specifications, and information the WPCA deems necessary to determine whether to approve the request. Extension, replacement, or relocation of a publically owned sewer shall not commence without the WPCA’s prior written approval and the issuance of a permit as set forth herein. Every extension, replacement, or relocation of a publicly owned sewer shall be designed and constructed in accordance with the current municipal design standards, requirements, specifications, and standard details as set forth in Section G. All expenses incurred pursuant to the extension, replacement or relocation of a publicly owned sewer including but not limited to application, engineering, legal, permitting, construction, inspection, and connection costs, shall be borne by the applicant. The WPCA reserves the right to request additional modifications to the publicly owned sewers or pumping stations based on the proposed modifications by the applicant, at no additional cost to the WPCA.

7. Before extending, replacing, or relocating a public sewer the owner or owner’s representative shall:

   A. Obtain approval in writing by the WPCA, and

   B. Post a bond with the WPCA and the City of Derby in an amount and form acceptable to both the WPCA and the City of Derby. The acceptable amount shall not be less than 10 % of the total cost of work or $10,000; which ever is greater.

8. To obtain a permit to construct an approved public sewer extension, replacement, or relocation, the owner shall beforehand agree that upon completion of said extension, replacement, or relocation the owner shall transfer ownership of the sewer to the WPCA free of charge. As-built Mylar plans for the extended, replaced, or relocated sewer and any other information required by the WPCA shall be turned over to the WPCA. Until such time as the sewer shall be considered to be privately owned by the applicant and shall be subject to the requirements pertaining to private sewers contained in these Regulations. The WPCA reserves the right to reject at its sole discretion ownership of any sanitary sewer extension into areas, which were previously unsewered.

9. Disconnection Permit: Prior to the demolition of any building or structure that is connected to the sewer system, the sewer for that building or structure shall be
permanently capped at the curb/property line adjacent to the sewer main or at another location approved by the WPCA or its authorized agent. A Sewer Disconnection Permit shall be obtained for the work, and the work shall be inspected and an as-built plan submitted. A Processing Fee as set forth in Appendix A shall apply to all disconnection permits.

10. All sanitary sewer extensions and connections shall conform to all Local, State and Federal requirements.

11. All costs and expenses incidental to the installation and connection of the building sewer shall be borne by the owner. These costs shall also include curb to curb repavement of the street in accordance with the requirements of the City of Derby – Department of Public Works.

12. Excavation in, or construction of any building or structure in a City of Derby/WPCA easement is prohibited without prior written authorization from the City of Derby/WPCA or unless authorized by said easement. Neither the City of Derby nor the WPCA shall be responsible for any and all costs associated with the demolition of or repairs to any illegal structure, which was placed in a City of Derby/WPCA easement or right of way, without written consent from both the City of Derby and the WPCA. Existing structures shall only be grandfathered in if they can provide documentation that both the City of Derby and the WPCA approved the construction within the easement. No structure shall be granted grandfather status if it is found to be in direct conflict with WPCA sewerage appurtenances.

13. The approval of the WPCA shall be required prior to installing below grade plumbing. The owner or owner’s representative shall submit a plan of the proposed plumbing to the WPCA for review and approval and shall bear all of the associated costs. Plumbing that is subject to the requirements of this Section shall include faucets, showers, baths, toilets, and washing machine hookups. All plumbing fixtures located at an elevation below the top of the manhole on the public sewer serving the proposed plumbing shall be deemed susceptible to backflow and shall be equipped with a backflow valve in accordance with the State Plumbing Code, the City of Derby Requirements for Site Plans, and the State Building Code. The backflow valve shall be installed and maintained at the owner’s expense. The WPCA shall not be responsible for any backups and associated charges due to the failure of the owner to install and/or maintain a backflow valve.
Section E

Annual Sewer Charges

1. Users of the public sewer shall be charged an annual Sewer Use Fee. The WPCA reserves the right to bill the annual sewer use fees on a per equivalent dwelling unit basis or a water consumption basis. The annual sewer use fees shall be as provided in Appendix A. The fees provided in Appendix A shall be reviewed and updated annually as need.

2. The annual sewer use fees billed on a per equivalent dwelling unit basis shall include a per calculated dwelling unit fee, capital projects fee and administrative fee.

3. The annual sewer use fees billed on water consumption basis shall include a flat fee, consumption fee, capital projects fee and administrative fee. The consumption used for residents who have well water shall be based on an average of the single family dwelling units throughout the City of Derby per dwelling unit of the property. The consumption for a condominium on a common water meter shall be totaled and then divided by the number of units with each unit paying an equal share.

4. Properties located in the City of Derby, whose wastewater is conveyed to the City of Ansonia sewer system for treatment and discharge shall be charged the applicable rates and fees established by the Ansonia Water Pollution Control Authority. Said users shall be classified as “Intermunicipal Users.” Sewer bills for “Intermunicipal Users” shall be billed the applicable rates and fees established by the Ansonia Water Pollution Control Authority, an additional percentage fee, in accordance with Appendix A, shall be levied, on top of these charges, by the WPCA as an administrative and maintenance fee for the use of the WPCA sewers, which are located in the City of Derby and owned and operated by the WPCA, to convey the wastewater to City of Ansonia.

5. Properties located outside of the City of Derby, whose wastewater is conveyed to the City of Derby sewer system for treatment and discharge shall be charged the applicable rates and fees established by the City of Derby WPCA. The lump sum fees and charges, for said properties, shall be billed to the appropriate WPCA with jurisdiction. The WPCA with jurisdiction shall pay the lump sum fees in full to the City of Derby within the allotted payment period outlined in this section. It is the responsibility of the WPCA with jurisdiction to collect the appropriate sewer use fees. The WPCA with jurisdiction shall provide the City of Derby WPCA with a copy of all water consumption data itemized by quarter for each property connected to the City of Derby sewer system. The WPCA with jurisdiction shall notify the City of Derby WPCA in writing, within 30 calendar days, when
connections to the sewer system are made. Failure to provide the itemized water consumption data by property or failure to notify the City of Derby WPCA that a new connection has been made will result in an administrative fine as described in Appendix A.

6. Annual sewer charges shall be billed on July 1st of each year. Sewer use payments shall be made within thirty (30) days of the billing date. Late payments shall be assessed the maximum allowable monthly interest rate as set by the State of Connecticut, until the payment is made in full to the WPCA. Annual sewer use charges and all associated interest fees and other charges shall be rounded up to the nearest whole dollar value. The annual sewer charges for each shall be based on the following.

7. Per Equivalent Dwelling Unit Basis - The annual sewer charges for each dwelling/classification type shall be based on the following:

A. Per Dwelling Unit Fees:

   Each property shall be billed an equivalent dwelling unit fee based on the property classification type (single family, multi family, commercial, etc.) as part of the annual sewer bill. No refunds of the equivalent dwelling unit fee shall be provided. In the case of properties with multiple property classifications/uses multiple equivalent dwelling unit fees shall be levied. For instance a property with a commercial storefront first floor and apartments above the storefront shall be levied the appropriate amount of equivalent dwelling units for the commercial property fees (for the store front) as well as the appropriate number of residential equivalent dwelling unit fees for the apartments.

   i. Single Family Dwellings: Shall be levied one equivalent dwelling unit fee per property.

   ii. Multiple Family Dwellings: Shall be levied one equivalent dwelling unit fee per dwelling per property (i.e. two family home equals’ two equivalent dwelling units, etc).

   iii. Condominiums: Shall be levied one equivalent dwelling unit fee per condo unit per property and one equivalent dwelling unit fee for each common room area (pool, recreation rooms, etc.).

   iv. Commercial and Industrial businesses and Exempt dwellings/properties: Shall be levied one equivalent dwelling unit fee for every X amount of gallons of annual water consumption. The X amount of gallons value shall be the average of the water consumption for single family dwelling units throughout the City or a gallon amount established by the WPCA for the average annual water consumption (i.e. for instance if the EDU water value was established at 250 gallons of average annual water consumption, the fee would be levied for every 250 gallons of annual water consumption.
consumption and the commercial entity had an average annual water consumption of 5,100 gallons, the property would be billed 20.4 or 21 equivalent dwelling units).

All calculated equivalent dwelling units shall be rounded up to the next whole number equivalent dwelling units.

B. Administrative Fines:

Properties with illegal connections to the sewer system or who violate these sewer regulations shall be fined and billed an administrative fine as outlined in Appendix A. Administrative fines shall be billed annually on top of the annual sewer use fees.

8. Water Consumption Basis - The annual sewer charges for each dwelling/classification type shall be based on the following:

A. Flat Fees:

Each property shall be billed an annual flat fee based on the property classification type (single family, multi family, commercial, etc.) as part of the annual sewer bill. No refunds of the flat fee shall be provided. In the case of properties with multiple property classifications/uses multiple flat fees shall be levied. For instance a property with a commercial storefront first floor and apartments above the storefront shall be levied a commercial flat fee (for the storefront) as well as the appropriative number of residential flat fees for the apartments. Each property classification type shall have a separate flat fee, which shall be levied in accordance with the flat fee rates outlined in Appendix A.

i. Single Family Dwellings: Shall be levied one flat fee per property.
ii. Multiple Family Dwellings: Shall be levied one flat fee per dwelling.
iii. Condominiums: Shall be levied one flat fee per condominium unit and one for each common room area (pool, recreation rooms, etc.).
iv. Commercial and Industrial business: Shall be levied one flat fee per business/occupant.
v. Exempt dwellings/properties: Shall be levied one flat fee per dwelling/property.

B. Water Consumption:

Each property shall be billed for the amount of an average day’s use of annual water consumed as part of the annual sewer bill. In the case of properties with multiple property classifications/uses the water consumption fees shall be
billed at the highest rate if only one common meter is provided. The annual water use shall be based on water consumption data provided by the Regional Water Authority. Water consumption data supplied by the Regional Water Authority shall be deemed to be accurate for purposes of billing sewer use fees. The Owner shall bear the burden of all costs to validate the consumption data from the Regional Water Authority. Water consumption data for the second quarter shall be dropped and the water consumption data for the fourth quarter shall be doubled for the determination of the annual water use for the said property. The WPCA billing quarters are as follows:

i. First – April, May and June
ii. Second – July, August and September (Dropped Annually)
iii. Third – October, November and December
iv. Fourth – January, February and March (Doubled Annually)
v. The WPCA may elect to drop and/or double different quarters annually at the sole discretion of the WPCA.

C. Administrative Fines:

Properties with illegal connections to the sewer system or who violate these sewer regulations shall be fined and billed an administrative fine as outlined in Appendix A. Administrative fines shall be billed annually on top of the annual sewer use fees.

9. The annual operations, maintenance, capital repair and replacement costs of the sewerage conveyance and treatment systems shall be financed through these fees and any additional sources of revenue. The WPCA shall annually review said fees and rates and revise them, as needed, to cover all operation, maintenance, replacement and debt service costs associated with the entire Wastewater Conveyance and Treatment System infrastructure. These fees shall be only charged to users who contribute sewage and waste discharges of strength equivalent to normal domestic wastes. All charges for sewage and waste discharges of non-domestic sewage strength shall be determined for each individual discharge after engineering analysis, the cost of which shall be borne by the user. The analysis shall include all conveyance, operations, maintenance, and treatment issues associated with said sewage and waste discharge.

10. All developed building lots within 300 feet of the public sewer system are required to connect to the public sewer system and pay annual sewer use and impact fees. Developed lots found to be within 300 feet of the public sewer system and not connected to the public sewer system shall pay annual sewer use fees and no refunds shall be granted for previous or future sewer use fees. All developed building lots within 300 feet of the public sewer system and not connected to the public sewer system shall connect to the public sewer system.
within 60 days of finding they are not connected to the public sewer system. Property owners of developed building lots not connected to the sewer may appeal the requirement to connect to the sewer, however they shall still be required to pay annual sewer fees regardless if they are connected or not.

11. Prior to the sale of any properties all past due sewer use fees and the associated interest shall be paid in full to the WPCA. All property owners are hereby notified that outstanding sewer use charges and any associated interest shall run with the title.

12. The WPCA staff shall have the right to inspect the property for illegal connections or the lack of a connection to the sanitary sewer system. The WPCA shall generate an inspection report, which shall identify any illegal connections or the lack of a connection to the sanitary sewer system and shall be used by the WPCA to levy fines for the illegal connections. No certificate of occupancy shall be provided for any property in the City of Derby until all past due bills and an illegal connection survey have been completed.

13. User Appeal Procedures

A. User appeals shall be directed to the WPCA Office in writing upon receipt of the sewer bill. User appeals shall not be considered if received at the WPCA Office after October 1 (or the next business day).

B. Any person, firm or corporation who disputes the amount billed, its user classification, or any other matter relating thereto shall set forth the nature of his/her objection or claim in writing, including supporting proof or verification, such as but not specifically limited to past twenty four (24) months water bills, any pertinent repair bills, etc. Said written objection shall be sent via certified mail or hand delivered to and received by the office of the WPCA. The WPCA shall consider the complaint at its next regularly scheduled meeting and if the matter is not resolved in favor of the complainant, shall schedule a hearing on the matter at its next regularly scheduled meeting thereafter. At said hearing, the complainant shall be entitled to be heard, represented by counsel and present such evidence as it desires. Any person aggrieved by the subsequent decision of the WPCA may take such appeal, if any, as provided under the Connecticut General Statues. Said objection shall in no way or manner constitute justification for not paying the complainant’s bill. Adjustments, if any, made by the WPCA shall be based on an average of the past twenty-four months of billing, with the highest water consumption quarter dropped.

C. In the case of external water service breaks after the water meter (between the water meter and the building foundation in the buried water service piping)
the highest two quarters shall be dropped only if they occur consecutively during the time period when the break was thought to have occurred. Under this case the past thirty six (36) months of billing shall be considered for any calculation of adjustments.

14. Adjustment of Annual Sewer Use Bills

A. Adjustments to the annual sewer use bills shall only be considered if the WPCA is billing based on Water Consumption Basis as noted in Item 8 of this Section. No adjustments shall be considered or granted if the WPCA is billing based on a Per Equivalent Dwelling Unit Basis as noted in Item 7 of this Section.

B. No adjustments shall be made for internal pipe breaks/failures unless the property owner can prove, beyond doubt, that water from the pipe breaks did not enter the sanitary sewer system. The owner may present evidence for WPCA consideration as to whether or not the water from the break entered the sanitary sewer system. WPCA staff, to determine if the failure has been adequately fixed and if the water from the break entered the sanitary sewer system, shall conduct an inspection of the property. A WPCA inspection fee may be levied for every inspection of the property, in accordance with the fees set forth in Appendix A. All fees shall be paid in full prior to the inspection. The WPCA shall have sole discretion in determining if the water entered the sanitary sewer system.

C. No adjustments shall be provided for the following:
   
   i. Liens, associated with the property as well as all costs associated with filing the liens,
   ii. Lack of repair or maintenance,
   iii. Tenant related or caused problems,
   iv. Wrong address – Owner’s Lack of supplying the WPCA with the correct address or with a change / correction of address.

D. No adjustments shall be granted for property owners with illegal connections to the sanitary sewer (sump pumps, roof leaders, floor drains, etc.) until such illegal connections are permanently removed from the sanitary sewer system and the WPCA staff completes an inspection. A WPCA inspection fee may be levied for every inspection of the property.

E. No adjustments shall be granted for property owners with past due bills until such bills and the associated interest as well as the current bill is paid in full.

F. No adjustment on interest due for past due bill shall be granted.
G. No adjustments of the flat fee, capital or office fees shall be granted.

15. Past Due Sewer Bills

Sewer bills are due and payable on July 1st of each year and full payment shall be made within thirty (30) days of the billing date. Delinquent sewer use bills shall be assessed interest on the first of every month starting on August 1st or the next business day (including the month of July). The assessed interest rate shall be the maximum allowable interest rate allowed by Law.

Sewer bill statements, intent to lien notices, and a final demand notice will be mailed to delinquent sewer users within one year of when the sewer use bill was due. Failure to pay delinquent sewer use bills may result in the WPCA referring the delinquent sewer use bills to an outside collection source (including but not limited to constables, state marshals, collection agencies and attorneys). The referral of delinquent sewer use bills shall result in various additional costs to the delinquent sewer user. The various costs include but are not limited to legal, mailing, collection agency and court costs up to and including foreclosure suits, etc. The delinquent sewer user or properly owner shall be responsible for all costs associated with past due sewer use bills as well as the cost of the sewer use bill plus interest.

16. Determination of Water Consumption

The Regional Water Authority provides the water consumption data to the WPCA for billing purposes. The WPCA utilizes the water consumption data in the preparation of the annual budgets as well as for billing of the consumption portion of the annual sewer fees. All water consumption data provided to the WPCA by the Regional Water Authority is assumed to be accurate. The WPCA shall not be liable and shall not consider nor provide any rebates of sewer fees to property owners for estimated water bills based on estimated water consumption. It is the sole responsibility of the property owner to be diligent in requesting that the Regional Water Authority perform water meter readings.
Section F

Building Sewers, Connections and Connection/Impact Fees

1. A separate and independent building sewer shall be provided for every building except where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard, or driveway. In such cases, the building sewer from the front building may, at the discretion of the WPCA, be extended to the rear building and the whole considered as two building sewers.

2. Existing building sewers may be used in connection with new buildings or rehabilitation/modification to existing buildings only after they are thoroughly cleaned; television inspected and are approved by the WPCA, to meet all requirements of these regulations and considered to be in “good” condition. The cost of cleaning and television inspecting shall be the sole responsibility of the owner.

3. The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling the trench, shall all conform to any applicable law and/or regulations including the requirements of the building and plumbing code and/or other applicable rules and regulations of the City of Derby. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the ASTM and WPCF Manual of Practice No. 9 or current edition shall apply. See Appendix B for WPCA approved sanitary sewer construction details.

4. Each connection of the building sewer to the public sewer shall be made at the “Y” or “T” branch, if such branch or tee is available at a suitable location. If no branch or tee is available, a connection to the public sewer may be made by tapping the existing public sewer. A tapping saddle or cut in “Y” or “T” branch shall be used and the connection method to the public sewer shall be approved by the WPCA.

5. Any roadside disturbance shall be repaired by the Owner, at no additional cost to the City or the WPCA, with proper compaction and curb to curb pavement in accordance with the requirements of the City of Derby – Department of Public Works.

6. Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by a means approved by the WPCA and
discharged to the building sewer. If in the event, the difference in elevation between the building sanitary plumbing and the invert of the sewer main is less than three (3) feet, a check valve or backflow prevention device shall be installed at the building. The cost of installing and maintaining check valves and backflow preventer shall be the sole responsibility of the owner.

7. No person shall make connection of roof downspouts, exterior/interior foundation drains, areaway drains, sump pumps or other sources of surface runoff or groundwater to a building sewer or building drain, which in turn is connected directly or indirectly to a public sanitary sewer. Any illegal connections found by the WPCA shall be immediately removed by the Owner at no cost to the WPCA. A yearly fine, as set forth in Appendix A, shall be levied upon the Owner until the illegal connections are removed.

8. Connections of the building sewer into the public sewer shall conform to all local, State and Federal requirements, these, or any other applicable, regulations of the City of Derby, and the procedures and specifications contained in the ASTM and the WPCF Manual of Practice No. 9 or the current edition. All such connections shall be made gastight and watertight. No deviation shall be permitted, unless such deviation is authorized under said code or regulation and approved by the WPCA in writing.

9. All excavations for building sewer installation, shall, where applicable, comply with all Local, State, Federal and OSHA Regulations, and shall be adequately guarded with barricades and lights so as to protect the public from hazard. The WPCA shall not be responsible for Contractor compliance and any associated fines associated with the said regulations. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the City of Derby. All publicly owned property which was disturbed and restored shall be guaranteed from defects to the maximum extent allowed by law and for at least a minimum of one (1) year.

10. The WPCA shall not be responsible for the enforcement of or compliance with all Local, State, Federal and OSHA Regulations by the Contractor.

11. Connection to the public sewer shall be made in conformity with and where required by the Rules and Regulations of the Board of Health.

12. Sewer connection/impact fees are established by the WPCA. The connection/impact fees shall be levied in accordance with the schedule set forth in Appendix A. Fees shall be paid in full prior to the issuance of a Sewer Connection Permit.
13. The impact fees for new connections to the sanitary sewer system are established by the WPCA to cover the costs associated with new sewer connections. Some of the costs are as follows:

   a. Hydraulic Capacity Improvements to the sanitary sewers for the conveyance of sewage for the new sewer connection. A limited amount of hydraulic capacity is available within the sanitary sewer collection system. Should the amount of capacity required for the new connection be greater than the amount available the Owner may be required to pay for additional capacity upgrades beyond those noted in Appendix A.

   b. Hydraulic Capacity Improvements to the wastewater pumping stations for the conveyance of sewage for the new sewer connection. A limited amount of capacity is available at each of the wastewater pumping stations, which are located throughout the sanitary sewer collection system. Should the amount of capacity required for the new connection be greater than the amount available the Owner may be required to pay for additional capacity upgrades beyond those noted in Appendix A.

   c. Purchase of hydraulic and organic treatment capacity at the WPCF for the treatment of the sewage from the new sewer connection. A limited amount of hydraulic and organic treatment capacity is available at the WPCF. Should the amount of capacity required for the new connection be greater than the amount available the Owner may be required to pay for additional capacity upgrades beyond those noted in Appendix A.

   d. Additional maintenance and labor costs associated with the new connection.

14. No connection permits or drainlayer permits shall be issued to any owners or drainlayers who is delinquent on any past sewer fees.
Section G

Materials and Workmanship

1. New building sewers, other private sewers, public and private sewer laterals and services, grease traps, oil traps, particle separators, appurtenances, and other wastewater facilities tributary to the City of Derby’s wastewater system shall be designed and constructed in conformance with current municipal standards and specifications as set forth in the ASTM and WPCF Manual of Practice No. 9 or current editions, the Gravity Sanitary Sewer Design and Construction Manual, New England Interstate Water Pollution Control Commission Guides for the Design of Wastewater Treatment Works, and the Uniform State Plumbing Code, shall apply.

2. Public and private sewers and sewer laterals and service connections shall be laid a minimum of at least 10 feet horizontally or two feet vertically (lower) and horizontally apart from any new or existing water main or service connection.

3. Any area, which is used to dispense fuel and is covered by a canopy or other type of roof or enclosure, shall drain into an approved oil trap and then into the sanitary sewer. Roof leaders and drainage shall not be introduced into the sanitary sewer. Alternatively, the owner may contain all runoff within the fuel dispensing area so that it is not drained off to a watercourse. The owner shall be responsible for the removal and disposal of any runoff that is contained in such a manner. The fuel dispensing area shall be graded so as to prevent any runoff to surrounding areas that drain into a storm drain. Runoff from canopies of gas stations and from fuel dispensing areas not in a building or covered by a canopy shall be drained according to all Local, State and Federal rules and regulations.

4. Any person seeking to construct, repair, or modify public sewers and sewer laterals, private sewer laterals, and service connections, may be required by the City of Derby to prepare and implement an Erosion and Sedimentation Control Plan to prevent the introduction of sediments into the City of Derby sewers and storm drains. The design of any facilities required pursuant to this section shall be subject to the approval of the City of Derby and the design, installation, and maintenance of such facilities shall be at the facility owner’s expense. The City of Derby shall have the right to inspect such facilities in accordance with these Regulations.

5. Pipe and fittings to be used for sanitary sewer mains shall either be ductile iron or PVC pipe, eight (8) inches or more in diameter. Ductile iron pipe shall be minimum class 52 conforming to ANSI Standards A21.50 and A21.51. PVC pipe shall conform to ASTM Standards D 1784 and D 3034-SDR 35. Standard length
of sewer service connection pipes shall be thirteen (13) feet. Sewer service or lateral connections shall be a minimum of six (6) inches or more in diameter.

6. Manholes shall be comprised of precast concrete sections conforming to ASTM C478. The wall thickness of precast sections shall be a minimum of 5-inch, 6-inch, 7-inch and 8-inch for 48-inch, 60-inch, 72-inch and 84-inch manhole diameters respectively. All cement shall be Type II Portland cement and the minimum compressive strength of the concrete shall be 4,000 psi at 28 days. Circumferential steel reinforcement in walls and bases shall be a minimum of 0.12 sq. in./lin. ft. for 4-foot diameter sections and 0.15 sq. in./lin. ft. for 5-foot and 6-foot diameter sections. Reinforcing shall extend into the tongue and groove. Conical reducing sections shall have a wall thickness not less than 5-inches at the bottom and wall thickness of 8-inches at the top. Conical sections shall taper from a minimum of 48-inches diameter to 24 or 30-inches diameter at the top. Slab top sections and flat riser sections (Grade Rings) shall meet or exceed an H-20 Loading requirement. Precast sections shall be manufactured to contain wall openings of the minimum size to receive the ends of the pipes set accurately to conform to the line and grade of the sewer. Cutting or tampering existing manholes, for the purpose of creating new openings or altering existing openings, shall not be permitted without written approval. The exterior surfaces of all manholes shall be given a minimum of one shop coat of bituminous dampproofing.

7. Manhole inverts shall be formed of brick and mortar. Bricks shall comply with ASTM C32, for Grade SS, hard brick, except that the mean of five tests for absorption shall not exceed 8 percent by weight. Mortar shall be composed of Portland cement, hydrated lime, and sand in which the volume of sand shall not exceed three times the sum of the volumes of cement and lime. Cement shall be Type II Portland cement. Hydrated lime shall be Type S conforming to ASTM C207. Sand shall comply with ASTM C144 specifications for "Fine Aggregate," except that all of the sand shall pass a No. 8 sieve. Precast concrete inverts may be acceptable if approved in writing by the WPCA or its authorized agent.

8. Manhole frames, covers and castings shall be of good quality, strong, tough, even-grained cast iron, smooth, free from scale, lumps, blisters, sandholes, and defects. Contact surfaces of covers and frame seats shall be machined. Castings shall be ASTM A48 Class 30B or better. The surface of the manhole cover shall have a diamond pattern with the cast words "City of Derby – Sanitary Sewer System". No air vents shall be permitted in the cover. Each manhole frame and cover shall be equipped with non-penetrating pick holes. Manholes frames and covers shall be as approved by the WPCA.
9. Manhole steps shall conform to ASTM C478 requirements and shall be fabricated of either extruded aluminum or steel reinforced plastic. Steps shall be uniformly spaced at a maximum of 12-inches unless otherwise approved in writing.

10. Manhole gasket materials shall be top grade (100% solids, vulcanized) butyl rubber and shall meet or exceed AASHTO M-198. Couplings at the manhole-pipe interface shall be made with a rubber seal system meeting the requirements of ASTM C923.

11. External sewer drop connections to existing or proposed manholes shall not be permitted. All sewer drop connections shall be internal with a Tee connection; stainless steel clamps and a 90° bend to direct flow to the outlet. All drop connections shall be approved by the WPCA. Manholes with internal drops shall be a minimum of six (6) feet in diameter.

12. In general, sewer lines shall not be allowed to have more than two (2) angle points, or a total angular deviation of one hundred eighty (180) degrees, unless granted variance by the WPCA. Cleanouts, handholes, or manholes for sewer services shall be installed at one hundred (100) foot intervals. Cleanouts along the service connection shall be as close as practicality makes possible to the property line.

13. All services shall be laid in an envelope of crushed stone with no less than six (6) inches of said material all around the barrel of the pipe. Three-quarter (¾”) inch crushed stone shall satisfy the requirements listed in Form 816 – Section M.02 number six (6) and all amendments thereto.

14. All gravity service lateral pipe and fittings shall be laid to a minimum slope of one-fourth (1/4) inch per foot (2%).

15. Line and grade of the pipe and fittings shall be controlled by the use of batter boards and string lines set for this purpose, or by laser. Batters shall not exceed a distance of thirty (30) feet apart unless otherwise directed by the WPCA. Batter boards shall be set by the contractor.

16. Trenches shall be excavated from the common sewer or from the end of the existing sewer service whichever is applicable, to the point of connection with the building plumbing outlet.

17. Where practical, when the common sewer is sufficiently deep, service connections shall be laid directly, without horizontal or vertical deflections, from the building drain to the connection at the common sewer.
18. Tunneling shall not be allowed unless specifically requested in the permit application and noted on the permit.

19. Connections made to the building plumbing system shall be upstream of any septic tanks or cesspools. Upon connection of the building plumbing system to the common sewers, existing septic tanks and cesspools shall be removed or completely filled with suitable material, to the satisfaction of the Board of Health.

20. Connections shall not be cut into sanitary sewers without permission. All pipe and fittings shall be inspected prior to any backfilling. Pipe joint connections shall be watertight. All connections to existing structures shall be through a core drilled opening and shall be sealed with a double link seal.

21. The entire section of sewer shall have a satisfactory water-tightness. Should the WPCA determine that the section(s) inspected are unsatisfactory, the section of sewer shall be repaired of all defects and re-inspected at the installer’s expense.

22. A plan of the method for repairing any defects that are found shall be submitted to the WPCA for review and approval prior to any work being performed.

23. Low Pressure Sewers:

   A. Design, installation, and/or construction of all low-pressure sewer systems shall be at the direction and approval of the WPCA. Design, installation, and/or construction of low-pressure sewer systems shall be in accordance with current municipal design standards.

   B. Ample provisions for odor control from low pressure sewers shall be provided. All costs associated with the design, construction and operations of an odor control system shall be the responsibility of the Owner.

   C. Grinder pumps for low-pressure services shall have a minimum wet pit size of 300 gallons. Each house equipped with a grinder pump shall have a local (in house) alarm with a battery backup, which shall be triggered during a high water, pump malfunction or other failure. The alarm shall be easily visible and audible to the home occupant. Grinder pumps at commercial, industrial or institutional establishments shall be equipped with an audible alarm and a minimum of two grinder pumps shall be provided. The property owner shall be solely responsible for the upkeep and maintenance including necessary replacement for the entire low-pressure building service including the grinder pumps and all associated incidentals.

   D. Low-pressure services shall be a minimum of one and one half (1½) inches in diameter. All low-pressure service connections to publicly owned sewers
shall be made via a section of gravity lateral piping tied into a proper “Y” or “T”. The gravity pipe shall have a minimum diameter of eight (8) inches and extend a minimum of 10 feet off the paving behind any curbing. Each low pressure service shall be equipped with a corporation stop and box as well as an inline check valve at the location where the low pressure service transitions to the gravity lateral piping.

24. Privately Owned Wastewater Pumping Stations:

A. Design, installation, and/or construction of all privately owned wastewater-pumping stations shall be at the direction and approval of the WPCA. Design, installation, and/or construction shall be in accordance with current municipal design standards.

B. Privately owned wastewater-pumping stations shall be equipped with the following:
   i. Dedicated wetwell and valve vault structure constructed of cast in place or precast concrete,
   ii. A minimum of two pumps one duty one spare,
   iii. Standby emergency generator
   iv. Discharge isolation and check valves.
   v. Force main isolation valve.

C. Owners of privately owned wastewater-pumping stations shall submit the following information on a monthly basis to the WPCA. The information shall be submitted both electronically and with a hard copy to the WPCA:
   i. Totalized daily flow records in gallons,
   ii. Pump run times,
   iii. Maintenance records for the mechanical equipment and as well as the exercise times for the generator.

D. The owners of privately owned wastewater-pumping stations shall grant the WPCA, at a moment’s notice, the right to inspect the privately owned wastewater pumping station.

E. The construction, operation and maintenance of privately owned wastewater pumping stations shall be borne solely by the property owner.

25. Wastewater Pumping Stations to be Owned by the WPCA upon completion:

A. Design, installation, and/or construction of all wastewater-pumping stations, for which ownership shall be turned over to the WPCA upon completion of
construction, shall be at the direction and approval of the WPCA. Design, installation, and/or construction shall be in accordance with current municipal design standards.

B. Wastewater-pumping stations which shall become Publicly Owned shall at a minimum meet the following requirements:

i. Minimum 8 ft diameter precast concrete wetwell with bituminous damproofing, anti-floatation collar, an aluminum access hatch (minimum 42”x48” double leaf) with a safety grate, and a minimum working volume of 7.5 feet (depth to invert and pump off elevation),

ii. Minimum 10 ft by 10 ft valve vault structure with an aluminum access hatch (minimum 42”x48” double leaf) with a safety grate, aluminum vault ladder and ladder extension, capped internal bypass connection and painted ductile iron vent w/ 316 S.S. insect screen,

iii. Discharge Series 75 pinch and Series 39 check valves by Red Valve,

iv. Minimum Class 53 Flanged Ductile Iron piping painted with an appropriate Tenemec coating. Paint color shall be gray and labeled “Raw Wastewater.” Piping within the wetewll shall also be painted,

v. PVC coated chain link site fencing with two slide gates,

vi. Site paving with road access and paving 3 ft beyond the fence line,

vii. Precast Concrete Generator/Utility Building with vinyl siding, standing seam metal roof, eyewash, utility sink, water service with backflow preventer and repair kit, and an on demand water heater,

viii. Minimum of 2 non-freeze yard hydrants,

ix. 480 Volt, Three Phase 60 Hz service power,

x. A minimum of two variable speed wastewater pumps one duty one spare operating on level controls,

xi. Instrumentation and control system consisting of station magnetic flow meter, liquid level sensing system (ultra sonic or pressure transducer), backup high water and pumps off floats, alarms, auto dialer system and other necessary appurtenances,

xii. Standby emergency generator with natural gas fuel service installed in the precast concrete building,

C. The WPCA has standardized all wastewater pumping equipment around one manufacturer and all wastewater pumping equipment controls around one instrumentation integrator. All wastewater pumping equipment shall be designed around the WPCA approved wastewater pumping equipment. All wastewater pumping equipment instrumentation/controls shall be designed and integrated by the WPCA approved instrumentation integrator.

D. Prior to construction the developer shall submit 100% live signed and sealed construction documents (plans and product specifications) to the WPCA for
review and approval. The developer shall bear the burden of all costs, including costs of legal services, related to the design, permitting and construction of the wastewater pumping station, which is to be publicly owned upon completion of construction.

E. The developer shall incorporate any and all changes requested by the WPCA.

F. The developer shall agree to repair / replace any faulty systems or equipment within the first 10 years of construction at no cost to the WPCA. The developer shall provide a performance bond equal to 100% of the cost of the construction of the wastewater pumping station to ensure compliance with this requirement.

G. The following pumping stations shall be considered publicly owned by the City of Derby – WPCA, upon the effective date of these sewer use regulations.

i. Division Street Wastewater Pumping Station
ii. Roosevelt Drive Wastewater Pumping Station
iii. Patty Ann Terrace Wastewater Pumping Station
iv. Burtville Avenue Wastewater Pumping Station
v. The WPCA shall update the list of publicly owned pumping stations as needed.

H. All other pumping stations shall be considered privately owned, upon the effective date of these sewer use regulations, and the responsibility of the operation and maintenance and replacement of privately owned wastewater pumping stations is the sole responsibility of the property owner. Privately owned pumping stations shall meet the requirements of Item 24 of this Section.

26. Drainlayers shall be responsible for all defects in materials and workmanship for the maximum time period allowed by law, and for at least a minimum period of one (1) year following the completion of sewer installation.

27. When ledge is encountered in the excavations, a permit must be obtained from the City of Derby for the use of explosives. All blasting shall be done in accordance with all applicable Local, State and Federal codes and regulations and any other requirements as imposed by the City of Derby fire department. Only persons licensed in the State of Connecticut by the Department of Public Safety for this purpose shall do all blasting.
28. All excavations and obstructions shall be adequately barricaded and lighted at all times to protect the public from harm and shall conform to all Local, State and Federal regulations.

29. All trenches shall be backfilled and compacted, and the street surfaces be paved curb to curb and repaired in accordance with requirements of the City of Derby.

30. Power shovels, bulldozers, loaders, trucks, and other equipment shall not be operated on or across sidewalks, berms, curbing’s, etc., until they have been properly protected from damage by planking or other approved means. All resulting damage shall be repaired to the satisfaction of the City of Derby at no additional cost to the City of Derby.

31. When making a sewer connection in a State Highway, the necessary permit from the Connecticut Department of Transportation (CONN DOT) shall be obtained prior to the issuance of a sewer connection permit by the WPCA. All work shall be done in accordance with the requirements set forth in the permit from CONN DOT. Any costs in connection therewith shall be borne by the applicant.

32. A street opening permit shall be obtained from the City of Derby for any work in a public way.
Section H

Use of Public Sewers

1. All applicable State and Federal laws required by the Clean Water Act of 1977 and all amendments thereto shall be fully incorporated and made enforceable by reference in these regulations.

2. No person shall discharge or cause to be discharged any storm water, surface water, groundwater, roof runoff, subsurface drainage, and industrial wastewater including uncontaminated cooling water, to any sanitary sewer. Industrial wastewater discharge shall be regulated by the Industrial Sewer Use Regulations.

3. Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the City of Derby. Industrial non-contact cooling water or unpolluted process waters may be discharged, upon approval of the City of Derby, to a storm sewer, combined sewer, or natural outlet, subject to the approval, if required, by the Connecticut Department of Environmental Protection.

4. No person shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass through or interference at the Wastewater Treatment Facilities. These general prohibitions apply to all sewer system users whether or not they are subject to industrial pretreatment or categorical pretreatment standards or any other National, State, or local standards or requirements.

5. Prohibited Discharges

No person shall discharge or deposit, or cause or allow to be discharged or deposited into the public sewer system any wastewater which contains the following substances, elements or properties:

A. Explosive Mixtures: Liquids, solids, or gases which by reason of their nature of quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the wastewater treatment system or to the operation of that system and meets a closed cup flashpoint of less than 140°F, (60°C) using the test methods specified in 40 CFR 261.21.
B. **Radioactive Wastes** Radioactive wastes or isotopes of such half-life or concentration that will or may cause damage or hazards to the Wastewater Treatment System of personnel operating the system.

C. **Toxic Substances** Any toxic substances in amounts exceeding standards promulgated by the Administrator of the United State Environmental Protection Agency pursuant to Section 307 of the Clean Water Act, and chemical elements or compounds, or other taste or odor producing substances, or any other substances which are not susceptible to treatment or which may interfere with the biological processes or efficiency of the treatment system.

D. **Pass Through** Any discharge, which alone or in conjunction with a discharge or discharges from others sources, causes a violation of any requirement of the Wastewater Treatment Facility NPDES permit, including an increase in the magnitude or duration of a violation.

E. **Heat** Wastewater having a temperature in excess of 104°F (40°C).

6. **Limited Wastewater Discharges**

   No person shall discharge or cause or allow to be discharged or deposited into the public sewer system any wastewater which contains the following substances, elements or properties:

   A. **Oils and Grease** Oil and grease and petroleum/non biodegradable cutting/mineral oils in amounts, which cause interference or pass through.

   B. **Toxic Gases/Vapors/Fumes** Noxious malodorous solids, liquids or gases, and toxic gases, vapors, and fumes which either singly or by interaction with other wastes, are capable of creating a public nuisance or hazard to life, or are or may be sufficient to prevent entry into a sewer for its maintenance and repair.

   C. **Solid or Viscous Wastes** Solid or viscous wastes which will or may cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the wastewater treatment system. The classification of materials in this category shall include, but are not limited to grease, uncomminuted garbage, 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, plastic, tar asphalt residues from refining or processing of fuel, or lubricating oil, and any type of sludge from holding or storage tanks located on the premises.
There shall be a presumption that any material in the foregoing classification does obstruct or interfere with the proper operation of the wastewater treatment system.

D. Flow Rate/Concentration Wastewaters at a flow rate or containing such concentrations or quantities of pollutants that can cause interference.

E. Unpolluted Waters Any unpolluted water including, but not limited to, water from cooling systems which will unreasonably increase the hydraulic load on the treatment system.

F. Discolored Material Wastes with objectionable color not removable by the treatment process.

G. Corrosive Wastes Any wastes, which will cause corrosion or deterioration of the treatment system. All wastes discharged to the public sewer system must have a pH value in the range of 6.2 to 9.0 standard units.

H. Trucked/Hauled Waste Any wastes trucked or hauled except at discharge points designated by the Superintendent in accordance with Item 10 of this Section.

7. Maximum Concentration of Pollutants

The maximum concentration of pollutants allowable in wastewater discharges to the wastewater collection system shall be in accordance with the Industrial Sewer Use Regulations (to be added as appropriate at a latter date) as well as all the existing Federal (including 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N), and State and Local guidelines and standards. In the event of a conflict between said standards and guidelines, the most restrictive shall apply. In the event of a change in Federal guidelines and standards, the amended or modified version shall be applied.

8. Special Agreements

Nothing in this section shall be construed as preventing any special agreement or arrangement between the City of Derby and any user of the wastewater collection system whereby wastewater of unusual strength or character is accepted into the system subject to any payments or user charges as may be required by the City of Derby. Any such agreement(s) shall be in writing and, in no case shall such agreement(s) result in a violation of Federal, State or Local pretreatment requirements.
9. No persons shall discharge or cause to be discharged the following described substances, materials, waters, or wastes if it appears likely in the opinion of the WPCA that such wastes can harm either the sewers, sewage treatment process or equipment, have an adverse effect on the receiving stream, or can otherwise endanger life, limb, public property, or constitute a nuisance. In forming the opinion as to the acceptability of these wastes, the WPCA shall give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant, and other pertinent factors. The substances prohibited are:

A. Any liquid or vapor having a temperature higher than one hundred four (104) °F (40°C);

B. Any water or waste containing fats, wax, grease or oils, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty-two (32) °F and one hundred fifty (150) °F (0 and 65°C);

C. Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths (3/4) horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the WPCA;

D. Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not;

E. Any waters or wastes containing heavy metals, EPA priority pollutants and/or similar objectionable or toxic substances, or wastes exerting an excessive chlorine requirement;

F. Any waters or wastes containing phenols, or other taste or odor producing substances;

G. Any radioactive wastes or isotopes of such half-life;

H. Any waters or wastes having a pH in excess of 9.0 or less than 6.0;

I. Materials which exert or cause:

   i. Unusual concentrations of inert suspended solids (such as, but not limited to, fullers earth, lime slurries and lime residues) or of
dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate).

ii. Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions).

iii. Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works.

iv. Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein.

J. Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed, or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of other Local, State or Federal agencies having jurisdiction over discharge to the receiving waters.

10. If any waters or wastes are discharged, or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in Items 3, 4 or 5 of this Section, and which in the judgment of the WPCA may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the WPCA may:

A. Reject the wastes;

B. Require pretreatment to an acceptable condition for discharge to the public sewers as outlined in the Industrial Sewer Use Regulations;

C. Require control over the quantities and rates of discharge;

D. Require payment to cover the added cost of handling and treating the wastes not covered by existing sewer charges under the provisions of this Section;

E. Seek administrative, civil, and/or criminal remedies, including, but not limited to, penalties;

F. If the WPCA permits the pretreatment or equalization of waste flows, the design and installation of the facilities and equipment shall be subject to the review and approval of the WPCA, and subject to and comply with any applicable code, regulation, and/or law.
11. Grease, oil, and sand interceptors shall be provided when, in the opinion of the WPCA or required by State Law, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients, except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the WPCA and shall be located as to be readily and easily accessible for cleaning and inspection. Such interceptors shall be inspected on a monthly basis and cleaned a minimum of every six months with repairs to the systems as needed, by the user at their expense. Failure to comply shall result in a daily fine as noted in Appendix A.

12. Where preliminary treatment, pre-treatment or flow-equalizing facilities are proposed by the owner or required by the WPCA for any waters or wastes, the owner at his expense shall install and maintain them continuously in satisfactory and effective operation at no cost to the WPCA. The owner shall also maintain the services of a licensed certified operator to run the system. The operator shall prepare and certify monthly operating reports. The reports shall be submitted by the owner for review and by the WPCA.

13. The WPCA may, when conditions at the wastewater treatment facilities permit, authorize the dumping of leachate, septic tank, cesspool and other select hauled wastes at the wastewater treatment facility. Waste haulers are subject to all Domestic and Industrial Sewer Use Regulations, and are further subject to the following conditions:

A. A permit to deposit hauled wastewater at the wastewater treatment facilities must be obtained from the WPCA;

B. The pumping contractor, upon granting of the permit, agrees to pay the WPCA the cost per gallon fee determined by the WPCA and must comply with the following regulations:

i. A signed slip by the property owner from whom the hauled wastes were removed, shall be provided.

ii. No grease, oil, gasoline, explosive fluids, acids, process wastes, or garbage shall be dumped.

iii. Discharge shall be controlled by a valve and approved tank outlet connection. Pumping’s shall be diluted to the extent prescribed by the WPCA.
iv. All septic tank and cesspool pumping’s shall have a pH in the range of 6.5 to 8.5.

v. Any drippings shall be cleaned up and washed away by the hauler as required to maintain a sanitary condition and to the satisfaction of the Superintendent.

vi. A representative sample shall be collected and provided to the wastewater treatment facility operations staff for testing prior to any waste being accepted. If testing indicates pH and/or concentrations exceeding typical values, or a violation of these Regulations, the waste may be refused or an appropriate surcharge fees may be levied.

C. Failure to observe these regulations will result in revocation of the permit.

14. Wastewater Load Surcharges:

A. The WPCA reserves the right to require non-residential users to conduct weekly, bi-weekly or monthly flow paced wastewater discharge sampling. With certified sample results provide to the WPCA. The cost of all sampling and installation of sampling devices shall be the sole responsibility of the property owner.

B. The WPCA reserves the right to conduct weekly, bi-weekly or monthly wastewater discharge sampling. The Owner of the location which is being sampled shall provide unlimited access to the WPCA staff to allow for the installation of sampling devices and shall provide all additional information requested by the WPCA with regards to the composition and quantity of chemicals utilized, frequency of use, etc. The property owner further agrees that there will be no tampering with WPCA property installed at their establishment. Should the WPCA decide to conduct sampling at the Owners establishment the cost of all sampling and installation of sampling devices shall be the sole responsibility of the WPCA.

C. Waste load surcharges may, at the sole discretion of the WPCA, be assessed upon non-residential users, by the WPCA, for the discharge of wastewater which exceeds any of the following concentrations:

   i. COD 600.0 mg/L
   ii. BOD₅ 300.0 mg/L
   iii. TSS 300.0 mg/L
   iv. NH₃ 15.0 mg/L
v. TKN  
vi. TP  
vii. Metals  

D. Surcharge fees for exceeding the maximum allowable discharge concentrations shall be levied by the WPCA and shall be paid annually by the Owner as an additional bill on top of the annual sewer use fees. Surcharge fees shall be paid per pound of exceedence on a yearly basis based on the average daily water consumption as billed by the WPCA during the annual billing cycle. Surcharge fees shall be as outlined in Appendix A.

E. A sample surcharge calculation is provided below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Annual Water Usage</td>
<td>10,000 gpd</td>
</tr>
<tr>
<td>Average Annual BOD₅ Concentration –</td>
<td>450 mg/L</td>
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<tr>
<td>Difference from Max BOD₅ Concentration –</td>
<td>150 mg/L</td>
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<tr>
<td>Surcharge Load [(10,000/1,000,000)<em>8.34</em>150] –</td>
<td>12.51 lbs/d</td>
</tr>
<tr>
<td>Annual Additional BOD₅ Load (Rounded Up) –</td>
<td>4,567 lbs</td>
</tr>
<tr>
<td>Sample Surcharge Cost per lbs of BOD₅ –</td>
<td>$1.50</td>
</tr>
<tr>
<td>Additional Sewer Use Fee (Rounded Up) –</td>
<td>$6,851</td>
</tr>
</tbody>
</table>
Section I

Protection from Damage

No person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment, which is a part of the sewer works. The City of Derby shall seek criminal and civil enforcement, including immediate arrest and prosecution, to the fullest extent permitted by law, against any person violating this provision.
Section J

Powers and Authority of Inspectors

1. To the fullest extent permitted by law, any City of Derby or WPCA employee and/or duly authorized representatives of the City of Derby or WPCA bearing proper credentials and identification may enter all properties (both public and private) for the purposes of inspection, observation, measurement, sampling, testing, and investigations to the degree necessary to permit the evaluation of the user’s compliance with these Regulations in accordance with the provisions of these Regulations. Owner and/or owner’s representative(s) shall grant access in a timely manner upon request.

2. Any City of Derby or WPCA employee and/or duly authorized representatives of the City of Derby or WPCA bearing proper credentials and identification shall have the right to enter all private properties on which the City of Derby or WPCA holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair, and maintenance of any portion of the sewage works lying within said easement. All entry and subsequent work, if any, on said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

3. Any City of Derby or WPCA employee and/or duly authorized representatives of the City of Derby or WPCA having been refused access to a building, structure, or property, or any part thereof, may seek an administrative search warrant to obtain such access to protect the public health, safety and welfare of the community.
Section K

Penalties and Enforcement

1. Any of the below remedies may be employed alone or in combination with any other available remedy.

2. Cease and Desist Order: Any person found to be violating any provision of these regulations may be served by the City of Derby with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. Prior to the issuance of a written notice, if the City of Derby deems a violation as causing immediate and imminent endangerment to persons or the treatment facilities, the City of Derby may verbally notify the violator to immediately and effectively halt or prevent any discharge to the system. Any orders issued verbally shall be memorialized in a written order within a reasonable time thereafter.

3. Any person who violates any provision of these regulations or who fails to comply with a Cease and Desist Order, may be assessed a civil penalty per day of violation. Each day in which any such violation shall continue shall be deemed a separate violation.

4. Any person violating any of the provisions of these regulations shall be subject to a civil penalty for each violation. Each day a violation shall continue shall be deemed a separate offense.

5. The City of Derby may seek equitable relief to enjoin any violation of these regulations.

6. Any person violating the provisions of these regulations shall become liable to the City of Derby and the WPCA for any expense, loss, or damage incurred by the City of Derby or the WPCA by reasons of such violation, including but not limited to any fines, charges, or assessments made or imposed on the City of Derby or the WPCA by Federal, State, or Local agency including reasonable attorney’s fees, court costs and all other expenses incurred as a result of such enforcement.

7. Violations may result in the revocation of all licenses or permits with the City of Derby.

8. Criminal Prosecution: The City of Derby may apply for a criminal complaint to issue under any applicable governing State or Federal law or regulation.
9. All expenses for user testing and monitoring to assure compliance with these regulations or any orders issued hereunder shall be at the sole expense of the user.

10. Pursuant to the General Laws of the State of Connecticut unpaid sewer use charges, service charges, fees, shall constitute a lien upon the property for which such charges or fees are assessed. Notwithstanding such lien, any overdue sewer use charge or service charge may be collected through any legal means.

11. It shall be a violation of these Regulations to knowingly makes false statements, representations, or certifications in any application, record, report, plan, or other document filed or required to be maintained pursuant to these Regulations, or to falsify, tamper with, or knowingly render inaccurate any monitoring device or method required under this ordinance. Any such violation shall be deemed proper grounds for the revocation of any permit issued in reliance upon such information and such action may be subject to criminal and/or civil enforcement.
Section L

Sewer Line Breaks and Blockages

1. Sewer lines located on private property shall be kept clean and free of breaks and blockages. It is the sole responsibility of the private owner to hire and pay for sewer line cleaning on private property. It is recommended that private sewer lines be cleaned every one to five years.

2. Blockages occurring in sewer lines between the house and the sewer main shall be the sole responsibility of the private landowner.

3. Blockages occurring on public property within the WPCA owned sewer main shall be the responsibility of the WPCA.

4. If it is determined that there is a break in the sewer line on private property and the private land owner procures the services of a sewer line cleaner and it is the opinion of the sewer line cleaner that the problem lies within the WPCA owned portion of the sewer, the owner shall notify the WPCA in writing. The WPCA will evaluate the problem area. If the problem is found to be in the WPCA portion of the sewer it will be fixed at the expense of the WPCA. If the problem is found to be on the private landowner’s property, all costs associated with the repair shall be the sole responsibility of the private landowner, including costs incurred by the WPCA to investigate the source of the problem.

5. See Figure 1 – Building Sewers.
Section M

Sewer Assessment Policy

1. The City of Derby WPCA, may assess a betterment or sewer assessment upon the owners of land abutting a public sewer main installed by the City of Derby by a rate based upon the uniform unit method. Sewer Assessments shall be determined utilizing the total number of existing residential sewer units to be served, and/or the residential equivalent of commercial, industrial or semi-public uses and shall be levied as betterment assessments, or alternatively, sewer privilege fees as described herein. The authority of the City of Derby to assess betterments, as well as the permitted methodologies for doing so, are described in Section 7-249 Connecticut General Statutes. All residential equivalent calculations for betterments shall be determined by an engineering analysis.

2. Betterments or sewer assessments are separate fees from the impact and annual sewer fees which are billed by the WPCA.

3. General Sewer Assessments
   
   A. Properties abutting a sewered street may be assessed by a rate proportional to the total number of existing or potential sewer units to be served at the time of the assessment. Said rate shall be determined by user class and shall apply to all lands developed or undeveloped abutting a sewered street. The total assessments shall not exceed 100% of the total sewer project cost which shall include total costs of engineering, survey, design, construction, land acquisition, construction engineering services, legal services, and all related contingencies, less all State and Federal aid received.

   B. The WPCA may levy, by preparing an Order of Assessment, assessments against all properties abutting a sewered street after completion of the pertinent construction and of the subject portion of the sewer system (approved by the WPCA) for its intended use. In the Order of Assessment, the WPCA shall designate the owner of each parcel as of the preceding January first, as liable to assessment as stated under the provisions of the Connecticut General Statutes.

4. Time of Sewer Assessment

   A. Betterments – The number of existing sewer units shall be determined by an engineering analysis for each sewer construction project. The time of assessment for properties abutting the sewered street shall be that date
upon which the sewer system with appurtenances is “approved for use.” In
the case where the construction of that portion of the sewer system (lateral
sewers) funded by betterments is completed prior to the date upon which
the sewer system is “approved for use” it shall be within the discretion of
the WPCA to establish an earlier date of assessment.

B. Sewer Privilege Fees – For those properties not abutting the sewer line at
the time of construction, but tying into the system at a future date, the time
of assessment shall be the date upon which that property connects into the
sewer system. The sewer privilege fee shall be equal to the original
assessed betterment fee plus compounded interest for the length of the
construction loan. The sewer privilege fee does not include other sewer
connection fees as outlined in Section F – Building Sewers and
Connections.

C. For those properties serviced by the sewer system but subdivided at a
future date, the time of assessment for the unsewered subdivision shall be
the date upon which those subdivisions connect to the sewer system. The
assessment fee shall be per equivalent dwelling unit for the subdivision
and shall be equal to the original assessed betterment fee plus
compounded interest for the length of the construction loan. The
assessment fee does not include other sewer connection fees as outlined in
Section F – Building Sewers and Connections.

5. General Sewer Unit Designation

Sewer units shall be determined based upon the user class of those properties to
be assessed betterments. Said classes shall include residential and non-
residential. The non-residential class shall include commercial, industrial,
municipal and any or all other non-residential properties. Sewer units shall be
determined based upon the residential equivalent of such commercial, industrial,
municipal, or other non-residential class, as provided herein.

6. Sewer Unit Determinations

Properties receiving direct benefit from the public sewer system shall be
designated a number of equivalent dwelling units in accordance with the
following:

A. Residential - Developed:

i. Single-family dwellings shall equal one equivalent dwelling unit.
ii. Multiple family dwellings (more than one dwelling unit) shall comprise a number of equivalent dwelling units based upon the following methodology:

   a. Rental properties (apartments) shall be assessed one equivalent dwelling unit for each apartment.

   b. Condominium complexes shall be assessed one equivalent dwelling unit for each unit.

   c. Multi family homes shall be assessed one equivalent dwelling unit for each home (i.e. two family home equals two equivalent dwelling units).

B. Non-Residential – Developed with water consumption:

   i. Non-residential property shall include all industrial, commercial, and municipal properties.

   ii. Non-residential buildings which are metered for water use shall comprise a number of equivalent dwelling units based upon the average water consumption for a 12 month period.

       Number of Equivalent dwelling units = Annual water usage in gallons / 250. (All decimals shall be rounded up to the next highest whole number)

   iii. All calculated equivalent dwelling units shall be rounded up to the next whole number equivalent dwelling units.

C. Non-Residential – Developed without water consumption data:

   i. Non-residential buildings not metered for water use shall comprise a number of equivalent dwelling units based upon the number of employees where every 10 employees is equal to one equivalent dwelling unit.

   ii. Non-residential buildings not metered for water use shall comprise a number of equivalent dwelling units based on an average daily flow calculation from Table 4 of the Connecticut Public Health Code for the estimation of wastewater flows, divided by 250 gallons.

   iii. All calculated equivalent dwelling units shall be rounded up to the next whole number equivalent dwelling units.
D. Residential – Undeveloped:

i. Undeveloped lots shall not be assessed sewer privilege fees. Future use of the land shall govern the assessment of sewer privilege fees as outlined in this Section.

ii. Future subdivisions shall be subject to the assessment of sewer privilege fees as outlined in this Section.

iii. All calculated equivalent dwelling units shall be rounded up to the next whole number equivalent dwelling units.

E. Non-Residential – Undeveloped:

Undeveloped lots shall not be assessed sewer privilege fees. Future use of the land shall govern the assessment of sewer privilege fees as outlined in this Section.

7. General Betterment Payment

The provisions of Connecticut General Statues relative to the assessment, apportionment, division, reassessment, abatement, and collection of sewer assessments, liens therefore, and interest thereon shall apply to assessments made under these regulations, and the Board of Assessors and Treasurer/Collector of the City of Derby shall have all of the powers conveyed by Connecticut General Statues relative to such assessments.

A. Lump Sum Betterments

The lump sum betterment payment for an assessed property shall be based upon the total number of equivalent dwelling units designated for said property at the time of assessment. Said number of equivalent dwelling units shall be determined as described herein. Lump sum betterments shall be payable upon connection to the completed sewer.

B. Apportionment of Betterment Payment

Property owners shall have the option to apportion betterment payments in accordance with the Connecticut General Statues. The interest rate charged by the City of Derby shall be the rate being charged to the City of Derby for the sewer construction project bond, plus any interest required by Connecticut General Statues.
8. **Private Sewer Extension**

If a developer, municipality or a person other than the WPCA, or a duly authorized representative of the WPCA, constructs a sewer extension to the public sewer system, the WPCA shall assess sewer impact fees in lieu of a betterment assessment with respect to each sewer unit to be served by said sewer extension. The sewer impact fees shall be per property classification as outlined in Appendix A. Sewer impact fees shall be levied at the time the property connects to the public sewer system. Sewer impact fees shall be paid as one lump sum at the time of connection. The developer shall also install capped sanitary sewer services from the proposed sewer main (gravity, low pressure) to a minimum of 10 feet beyond the curb line for all properties along the sewer extension route. The gravity sewer main and any/all associated pumping stations/low pressure sewers shall be sized to accommodate all of the proposed properties as well as any other growth, which may occur from the sewer extension.

9. **Private Sewer Extension Connection Fees**

The developer, municipality and/or property owners connecting to a private sewer extension shall bear the burden of all costs, including costs of legal services, related to the following:

A. The WPCA reserves the right, at its sole discretion, to require the review of design plans and specifications for the private sewer extensions to be accepted, as part of the public sewer system be reviewed by a Registered Professional Engineer in the State of Connecticut selected by the WPCA. All design plans submitted for review shall be 100% complete and shall be live stamped by a Registered Professional Engineer in the State of Connecticut.

B. Inspection fees related to the installation of the private sewer extension tying into the public sewer system.

C. Sewer connection fees as outlined in Section F – Building Sewers, Connections and Connection/Impact Fees and provided in Appendix A.

D. Installation inspection fees performed by an inspector approved by the WPCA.

E. Private costs associated with the design and construction of a private sewer extension shall not be considered with respect to the sewer impact fee. Payments or method of payment related to these costs shall not be reflected within the sewer impact fee.
10. Public Sewers in Unaccepted Ways

If a property abuts a private or unaccepted way within which a public sewer has been installed, or if a property lies within one hundred (100) feet of a public sewer within a private or unaccepted way, the WPCA shall assess a sewer impact fee in lieu of betterment assessment against said property. For this case, the sewer impact fee shall be equivalent to the betterment assessment for said property as determined by the procedures outlined in this Section. The sewer impact fee shall be levied at the time of connection to the public sewer. All provisions governing the payment and method of payment related to betterment assessments as described in this Section shall apply.

11. Abatement and Deferrals

Property owners must file grievances and requests for abatements in accordance with the Connecticut General Statues. The WPCA upon receipt of grievances and requests for abatements shall have up to four (4) months to act on the request. The WPCA shall notify the owner within ten (10) days of making their decision whether the request was granted or denied.

The following deferrals may be granted:

A. A Deferral of betterment principal and interest may be granted to eligible property owners who are receiving deferral of their property taxes. The sewer betterment assessment shall be postponed until property ownership is transferred, at which time, the original principal, plus interest, shall be due and payable in full.

B. A Deferral of betterment principal and interest for vacant, undeveloped property may be granted to eligible property owners. The property owner shall pay a 4% interest charge annually (on the sewer betterment assessment) and pay the sewer betterment assessment principal, in full, within 3 months after the commencement of construction upon the lot.
Section N

Validity

1. If any section, subsection, sentence, word, clause, phrase or portion of this Regulation is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions of this Regulation.

2. These Regulations shall be in full force and effect from and after their passage, approval, recording, and publication as provided by law.

3. Any rule or regulation adopted by the Regional Wastewater Treatment Facility or Regional Water Pollution Control Authority, if applicable, as it pertains to wastewater shall also be strictly adhered to regardless if it is included in these regulations. However, in the event that these regulations are stricter than the Regional Wastewater Treatment Facility or Control Authority these regulations shall govern.

Passed and approved by the WPCA of the City of Derby, Connecticut, on the 19th day of April 2012, for implementation on July 1, 2012.
APPENDIX A

SEWER USE FEE STRUCTURES AND STANDARD ADMINISTRATIVE DOCUMENTS AND FORMS FOR THE USE OF PUBLIC SEWERS IN THE CITY OF DERBY – CONNECTICUT

Effective Date: July 1, 2012
# Annual Sewer Use Fees - Water Consumption Billing

<table>
<thead>
<tr>
<th>Billing Use Type</th>
<th>Rates / Charges</th>
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<tbody>
<tr>
<td>Commercial, Industrial, Exempt and Residences used for Commercial Purposes</td>
<td>Minimum Charge $250.00</td>
</tr>
<tr>
<td></td>
<td>Consumption Fee (Per Avg Gal/Day/Yr)</td>
</tr>
<tr>
<td>Single Family to Multi Family Residential Properties - City Water</td>
<td>Flat Fee per Family Unit $150.00</td>
</tr>
<tr>
<td></td>
<td>Plus Consumption Fee (Per Avg Gal/Day/Yr)</td>
</tr>
<tr>
<td>Single Family to Multi Family Residential Properties - Well Water</td>
<td>Flat Fee per Family Unit $150.00</td>
</tr>
<tr>
<td></td>
<td>Plus Consumption Fee (Per Avg Gal/Day/Yr)</td>
</tr>
<tr>
<td>Multiple Condominiums w/ Common Water Meter</td>
<td>Flat Fee per Condo Unit $150.00</td>
</tr>
<tr>
<td></td>
<td>Plus Consumption Fee (Per Avg Gal/Day/Yr)</td>
</tr>
<tr>
<td>Intermunicipal Users Markup</td>
<td>25%</td>
</tr>
</tbody>
</table>

# Annual Sewer Use Fees - Equivalent Dwelling Unit Billing

<table>
<thead>
<tr>
<th>Billing Use Type</th>
<th>Rates / Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial, Industrial, Exempt and Residences used for Commercial Purposes</td>
<td>Cost Per Calculated EDU $375.00</td>
</tr>
<tr>
<td>Single Family to Multi Family Residential Properties - City Water</td>
<td>Cost Per EDU per Family Unit $375.00</td>
</tr>
<tr>
<td>Single Family to Multi Family Residential Properties - Well Water</td>
<td>Cost Per EDU per Family Unit $375.00</td>
</tr>
<tr>
<td>Multiple Condominiums w/ Common Water Meter</td>
<td>Cost Per EDU per Condo Unit $375.00</td>
</tr>
<tr>
<td>Intermunicipal Users Markup</td>
<td>25%</td>
</tr>
</tbody>
</table>

## Miscellaneous Fees and Charges

<table>
<thead>
<tr>
<th>Service</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV Inspection, per inspection</td>
<td>$1,400.00</td>
</tr>
<tr>
<td>Septic Waste Disposal per gal</td>
<td>$0.10</td>
</tr>
<tr>
<td>Vector Truck per Hour (min 4 hr)</td>
<td>$200.00</td>
</tr>
<tr>
<td>Die Flooding Test, per Test</td>
<td>$75.00</td>
</tr>
<tr>
<td>Non Septic Hauled Waste Disposal per gal</td>
<td>$0.20</td>
</tr>
<tr>
<td>On Site Home Inspection / Investigation Fee</td>
<td>$100.00</td>
</tr>
<tr>
<td>(Non-WPCA Fault), per Hour (min 2 hr)</td>
<td></td>
</tr>
<tr>
<td>Processing / Office Charges (included with</td>
<td>$75.00</td>
</tr>
<tr>
<td>all fees except Septic and Non-Septic Waste)</td>
<td></td>
</tr>
<tr>
<td>Fats, Oils and Grease Pretreatment Application</td>
<td>$200.00</td>
</tr>
<tr>
<td>Minimum WPCA Administrative Fine, per day</td>
<td>$1,250.00</td>
</tr>
</tbody>
</table>
# Sewer Impact Fees

**Residential Properties**

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Fee - Single Family Dwelling</td>
<td>$4,662.00</td>
<td>Observation Fee Single Family</td>
<td>$250.00</td>
</tr>
<tr>
<td>or Each Condo Unit</td>
<td></td>
<td>Observation Fee Two Family</td>
<td>$400.00</td>
</tr>
<tr>
<td>Each Additional Family Unit</td>
<td>$2,331.00</td>
<td>Observation Fee Three Family</td>
<td>$550.00</td>
</tr>
<tr>
<td>Hookup Fee per Lateral</td>
<td>$250.00</td>
<td>Observation Fee Four Family</td>
<td>$700.00</td>
</tr>
<tr>
<td>Each additional Lateral</td>
<td>$300.00</td>
<td>Each Additional Unit Over 4</td>
<td>$200.00</td>
</tr>
<tr>
<td>As Built Fee per Lateral</td>
<td>$500.00</td>
<td>Engineering Fee (if needed)</td>
<td>$700.00</td>
</tr>
</tbody>
</table>

**Commercial Properties**

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Fee Calculated per Average Daily</td>
<td>$15.00</td>
<td>Installation Observation Fee</td>
<td>$800.00</td>
</tr>
<tr>
<td>Flow Gallon based on Use and BLDG ft²</td>
<td></td>
<td>Each Additional lateral</td>
<td>$300.00</td>
</tr>
<tr>
<td>Minimum Impact Fee</td>
<td>$6,500.00</td>
<td>Engineering Fee</td>
<td>$700.00</td>
</tr>
<tr>
<td>Hookup Fee per Lateral</td>
<td>$1,000.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Each additional Lateral</td>
<td>$300.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Built Fee per lateral</td>
<td>$1,000.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Industrial Properties**

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Fee Calculated per Average Daily</td>
<td>$15,000.00</td>
<td>Value Based on a Case by Case Basis</td>
<td>$1,250.00</td>
</tr>
<tr>
<td>Flow Gallon based on Use and BLDG ft²</td>
<td></td>
<td>Installation Observation Fee</td>
<td></td>
</tr>
<tr>
<td>Minimum Impact Fee</td>
<td></td>
<td>Each Additional lateral</td>
<td>$450.00</td>
</tr>
<tr>
<td>Hookup Fee per Lateral</td>
<td>$1,000.00</td>
<td>Engineering Fee</td>
<td>Case by Case</td>
</tr>
<tr>
<td>Each additional Lateral</td>
<td>$300.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Built Fee per lateral</td>
<td>$1,500.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
City of Derby  
Water Pollution Control Authority  
1 Caroline Street, Derby, CT 06418  
phone: Billing (203) 735-1465  Permits (203) 736-1475  fax (203) 736-6975

Application for New Sewer Connection, Sewer Repair, or Disconnect

<table>
<thead>
<tr>
<th>To be Filled Out by PROPERTY OWNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner:</td>
</tr>
<tr>
<td>Permanent Address of Owner:</td>
</tr>
<tr>
<td>Owner Phone:</td>
</tr>
<tr>
<td>Location of property to be developed: (House/Lot)</td>
</tr>
<tr>
<td>Sewer Connection: New ( ) Repair ( ) Disconnect ( )</td>
</tr>
<tr>
<td>Type of Use: Residential: One Family ( ), 2 Family ( ), 3 Family ( ), 4 + ( )</td>
</tr>
<tr>
<td>Commercial ( ) Industrial ( )</td>
</tr>
</tbody>
</table>

This is a connection for: one building ( ) or more buildings ______

The undersigned agrees to abide by all provisions of laws, ordinances, and rules and regulations pertaining to Derby sewers which are now in force or may be adopted in the future, to maintain the building sewer at no expense to the City, and to notify the Authority when the building sewer is ready for inspection and connection to the public sewer, but before any portion of the work is covered. Plans and specifications of the proposed building sewer are attached hereunto as Exhibit "A" (Three sets required).

| Owner Signature: | Date: |

<table>
<thead>
<tr>
<th>To be Filled Out by CONTRACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor Name:</td>
</tr>
<tr>
<td>Contractor Company:</td>
</tr>
<tr>
<td>Contractor Address:</td>
</tr>
<tr>
<td>Contractor Phone:</td>
</tr>
<tr>
<td>License No:</td>
</tr>
</tbody>
</table>

Contractor's statement: I have thoroughly investigated the existing plumbing at this location and have disconnected and properly diverted all roof drains, yard drains, cellar drains, cooling water or other unauthorized connections to the sewer. I further certify that any necessary plumbing installation has been installed and does comply to the applicable codes of the City of Derby and the State of Connecticut.

| Contractor Signature: | Date: |

WPCF Superintendent: Date:

Appendix A - Page A-3A
# Application for New Sewer Connection, Sewer Repair, or Disconnect

<table>
<thead>
<tr>
<th>Fees</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Fees: $</td>
<td></td>
</tr>
<tr>
<td>Hook-Up Fees: $</td>
<td></td>
</tr>
<tr>
<td>Observation Fees: $</td>
<td></td>
</tr>
<tr>
<td>As-Built Fees: $</td>
<td></td>
</tr>
<tr>
<td>Engineering Fees: $</td>
<td></td>
</tr>
<tr>
<td>Other Fee: $</td>
<td></td>
</tr>
</tbody>
</table>

As-Built Fee is refunded only after the building sewer is installed to the satisfaction of the W.P.C.A. and As-Built drawing received.

Total fees Due: $  

Engineer Approval Needed:  

yes ( )  no ( )  n/a ( )

Type of Payment:  
Cash ( )  or Check ( )

Payment Received:  

---

Owner Signature:  
Date:  

WPCF Superintendent:  
Date:  

WPCA Administrator:  
Date:  

---

## Project Installation Observation Record - W.P.C.A Staff

WPCF Superintendent Approval:  

W.P.C.A. Approval:  

Engineer Approval:  

Pump-Up inspected:  

Final Observation & All Work Approved:  

---

If an inspector has to stay to inspect the job after 2:30 pm, he/she will have to be paid time and one-half or double time on holidays. Application is good for one year from date of approval, as outlined in Section D of the Sewer Use Regulations. If sewer is not constructed in this time, a new application and fee are required.

Contractor Signature:  
Date:  

WPCF Superintendent:  
Date:
Contractors Registration Form

Name: ________________________________________________________________

Business Name: _______________________________________________________

Address: _____________________________________________________________

City: __________________________________________________________________

Phone Owner: __________________________________________________________

State: ______ Zip: ______

Telephone Number (Business): ___________________________________________

Cell Phone Number (Optional): __________________________________________

Fax Number: __________________________________________________________________

Connecticut State License Number (include a copy of license): __________

In accordance with the terms of the regulations set forth by the Water Pollution Control Authority, City of Derby, the person/entity/contractor herein agrees to comply with all regulations pertaining to the installation and connection of building sewers to public sewers.

Registration can be revoked by the Authority subject to any violation of the regulations.

Registration is renewable January 1st each calendar year, subject to the fee set forth by the Authority, at the office of the W.P.C.A., City Hall, 1 Elizabeth St, Derby, CT 06418

Signed: ___________________________ Date: _______________

(Contractor)

To Be Filled Out by W.P.C.A. Staff

Signed: ___________________________ Date: _______________

(W.P.C.A. Agent)

Fee Collected: $125.00 Registration Number: ____________

Permit Bond on file: yes ( ) no ( )

Insurance Certificate on file: yes ( ) no ( )

Appendix A - Page A-4
The W.P.C.A. shall be supplied with appropriate, acceptable "As-Built" drawings that shall be to scale, with horizontal and vertical dimensions, showing the location of the service lines with respect to the building foundation, the existing sanitary sewer, bends, cleanouts, and any other relevant land markings.
Call Out Report Form

Name of person reporting problem: ____________________________

Time/Date of Call: ____________________________

Location or Address of problem: ____________________________

Inspected by: ____________________________

What problem did you find: ____________________________

Was it our problem: (yes/no) ____________________________

Was anyone else called in: (yes/no) ____________________________

Whom did you call: ____________________________

Time to do job: ____________________________

What is the cause of the problem and what should be done to correct it?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
NOTES:
1. Property owner responsible for all maintenance within Zone A. Requires a licensed plumber and inspection by City Plumbing Inspector.
2. Property owner responsible for all maintenance associated with blockages of whatever nature within Zones A, B, and C.
3. Property owner responsible for all maintenance associated with pipeline breaks/replacement in Zones A, B and C.
4. City responsible for all maintenance associated with pipeline breaks within the Public Sewer Main only.

BUILDING SEWERS
No Scale

CITY OF DERBY
WATER POLLUTION CONTROL AUTHORITY
APPENDIX A - PAGE A-7
### Commercial/Industrial Buildings
- Factory (Add 10 GPD for showers), per employee: 25
- Office (Average 200 sq. ft. gross area/person), per employee: 20
- Small Retail Building-Less than 2,000 sq. ft. gross area, per employee: 20
- Large Retail/Commercial Building*, per sq. ft. of gross area: 0.1
  *Grocery stores must increase design flow to account for delis and bakeries. Deli and bakery flow: (Table No. 7 Applic. Rate)

### Camps/Family Campgrounds
- Residential Camp (Semi permanent), per person: 50
- Campground with Central Sanitary Facilities, per person: 35
- Campground per Camp Space (Water and sewer hook-ups): 75
- Day Camp, per person: 15
- Picnic Park (Toilet wastes only), per person: 5
- Picnic Park with Bathhouses, Showers, Flush Toilets, per person: 10

### Residential Institutions (Table No. 7 Applic. Rate)
- Hospital, per bed: 250
- Rest Home, per bed: 150
- Convalescent Home, per bed: 150
- Institution, per resident: 100
- Group Home/Community Living Arrangement, per client*: 100-150**
  *Use maximum occupancy unless state license restricts occupancy & requires local health department approval in accordance with PHC Section 19-13-B100a for occupancy increases.
  **Use higher flow for large tub/on-site laundry.

### Restaurants (Class 3 & 4 Food Service Establishments) and Bars (Table No. 7 Applic. Rate)
- Restaurant (Public toilets provided), per seat: 30*
- Restaurant (No public toilets), per seat: 20*
  *Design flow shall be increased by 50% if breakfast, lunch & dinner are provided
- Take-out Food Service, per meal served: 5
- Bar/Cocktail Lounge (No meals), per seat (Table No. 8 Applic. Rate): 15

### Recreational Facilities
- Swimming pool, per bather: 10
- Tennis Court, per court: indoor/outdoor: 400
- Theater, Sport Complex, per seat: 3.5

### Church/Religious Building
- Worship Service, per seat: 1
- Sunday School, per pupil: 2
- Social Event (Meals served), per person (Table No. 7 Applic. Rate): 5

### Miscellaneous
- Auto Service Station, per car serviced: 5
- Beauty Salon, per chair/station (Table No. 7 Applic. Rate): 200
- Barber Shop, per chair: 50
- Dental/Medical Office with Examination Rooms, per sq. ft. of gross area: 0.2
- Dog Kennel, per run (Roof must be provided) (Table No. 7 Applic. Rate): 25
- Laundromat (Commercial: Require DEP Permit), per machine (Table # 7 Applic. Rate): 400
- Motel (No Food Service, Kitchenette or Laundry Facilities), per room: 75
- Motel (With Kitchenette but no Laundry Facilities): 100
- Marina (Bath-house & Showers Provided), per boat slip: 20
APPENDIX B

STANDARD CONSTRUCTION DETAILS FOR THE INSTALLATION AND CONNECTION OF BUILDING SEWERS AND FOR THE USE OF PUBLIC SEWERS IN THE CITY OF DERBY – CONNECTICUT

Effective Date: July 1, 2012
4'-0" DIA. MANHOLE PLAN
N.T.S.

ADJUST TO REQUIRED GRADE WITH A MIN. OF ONE COURSE AND A MAX. OF FIVE COURSES OF BRICK MASONRY OR REINFORCED CONC. GRADING RINGS, ALL BRICKS TO BE LAID AS HEADERS

2'-0" UNLESS OTHERWISE INDICATED

PRECAST CONCRETE MANHOLE CONE

BUTYL RUBBER JOINT SEALANT (TYP)

REINFORCING STEEL (TYP)

PRECAST CONCRETE MANHOLE RISER

MANHOLE STEPS

8" MIN.

3,000 PSI CONCRETE CRADLE TO UNDISTURBED GROUND

4,000 PSI CONCRETE BASE (POURED IN PLACE) TO BE CONSTRUCTED ON MINIMUM 6" COMPACTED SCREENED GRAVEL

NOTE: SEE SITE PLAN FOR ORIENTATION OF PIPING

4'-0" DIA. PRECAST CONCRETE "DOG-HOUSE" MANHOLE DETAIL
N.T.S.
TYPICAL TRENCH DETAIL FOR LOW PRESSURE SEWER

N.T.S.
SUBMERSIBLE TRANSMITTER
JUNCTION BOX MOUNTING DETAIL
N.T.S.
TABLE OF CONCRETE THRUST RESTRAINT MINIMUM BEARING AREAS IN SQUARE FEET AGAINST UNDISTURBED MATERIAL FOR WATER MAIN FITTINGS

<table>
<thead>
<tr>
<th>SIZE OF MAIN</th>
<th>90° BENDS, TEES, CAPS AND PLUGS</th>
<th>45° BENDS AND WYES</th>
<th>22-1/2° BENDS</th>
<th>11-1/4° BENDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6”, 8”</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10”, 12”</td>
<td>12</td>
<td>9</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>16”</td>
<td>20</td>
<td>15</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>20”</td>
<td>36</td>
<td>24</td>
<td>13</td>
<td>7</td>
</tr>
</tbody>
</table>

NOTES: 1. ALL WATER MAIN FITTINGS SHALL HAVE CONCRETE BACKING FOR THRUST RESTRAINT UNLESS OTHERWISE SPECIFIED.

2. CONTRACTOR SHALL USE CARE TO AVOID PLACEMENT OF CONCRETE ON THE FITTING JOINTS

CONCRETE THRUST RESTRAINT FOR FITTINGS
N.T.S.
USE EXISTING PENETRATION WHERE POSSIBLE OR CORE FOUNDATION. BULKHEAD WITH CEMENT.

ROOF LEADER CONDUCTOR

CLEAN-OUT WYE WITH 2-INCH SIDE INLET (WYE WITH FITTING CLEAN-OUT ADAPTER AND CLEAN-OUT PLUG). CONNECT 2" SUMP PUMP PIPING TO SIDE INLET

CHECK VALVE

6" PVC DRAIN SERVICE CONNECTION

ROOF LEADER CONDUCTOR CONNECTION

SEE SUMP PUMP DETAIL

REMOVE BACKFLOW VALVE AND PLUG PIPE (WATER TIGHT CONNECTION)

EXISTING SUMP

NOTES:
1. CONTRACTOR TO PROVIDE ALL COUPLINGS AND FITTINGS AS REQUIRED.

SUMP PUMP CONNECTION DETAIL
NOT TO SCALE
NOTES:
1. SUMP PUMP TO BE INSTALLED WHEREVER EXISTING SUMP HOLE EXISTS IN THE AREAS OF ROOF LEADER SEPARATION.
2. CONTRACTOR TO PROVIDE ALL COUPLINGS AND FITTINGS AS REQUIRED.
3. INSTALL SUMP PUMP BASIN PER MANUFACTURER'S SPECIFICATIONS.
4. SUMP PUMP BASIN TO BE OF SUFFICIENT SIZE TO ALLOW FOR SUMP PUMP INSTALLATION.
5. CONTRACTOR TO PROVIDE AC POWER TO CONNECT PUMP TO AC POWER SUPPLY.
6. CONTRACTOR TO CONFORM TO ALL REQUIREMENTS FOR MATERIALS, INSTALLATION AND EQUIPMENT APPROVALS OF STATE, LOCAL, UNDERWRITER'S LABORATORIES, INC., OR OTHER APPLICABLE CODES, WHETHER OR NOT CALLED FOR ON THE DRAWINGS OR IN THE SPECIFICATIONS.

SUMP PUMP DETAIL

NOT TO SCALE
NOTES:
1. SEE SANITARY SEWER TRENCH DETAIL.

SHEETING DETAILS
N.T.S.
NOTES:
1. See sanitary sewer trench detail.

EXISTING SHEETING

EXISTING PIPE/UTILITY

EXISTING GRADE

REMOVED AS SPECIFIED SHEETING TO BE

INSTALLED TO ELEVATION OF EXISTING GRADE

INSTALLATION AS REQUIRED FOR SHEETING

REPLACE EXISTING PAVEMENT
1. Ensure the existing roof leaders have been disconnected and disconnected prior to construction.

2. Contractor to verify roof leader separation type A or Type B as directed.

BUILDING WITH THE CITY PRIOR TO CONSTRUCTION.

NOTE:

- The discharge to the ground surface, the contractor shall install a disconnecting device. The existing roof leaders shall remain in place as shown.

- Connect to exterior 6" PVC drain as required.

- Provide cleanout at each bend as required.

- Provide fittings as required.

- Cleanup after installation.

- Number and location of existing connections shall be maintained.

- At front of building.

- Roof leader conductor connections shall be maintained at existing connections.

- Number and location of existing connections shall be maintained.

- At rear of building.

- Roof leader connections shall be maintained at existing connections.

- Number and location of existing connections shall be maintained.
NOTES:

1. CONTRACTOR TO VERIFY ROOF LEADER SEPARATION TYPE FOR EACH BUILDING PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO PROVIDE ALL COUPLINGS AND FITTINGS AS REQUIRED.

ROOF LEADER CONDUCTOR CONNECTION DETAIL

NOT TO SCALE
ROOF LEADER CONDUCTOR ABANDONMENT DETAIL

NOT TO SCALE
PLAN

OPENING TO SUIT FRAME AND COVER

STEEL REINFORCING TO MEET OR EXCEED HS-20 LOADING

TOP SLAB TO BE USED WHERE CONE SECTION CANNOT BE USED OR WHERE INDICATED ON THE DRAWINGS

SECTION

MANHOLE TOP SLAB

N.T.S.
MANHOLE SEAL DETAILS

- Precast Concrete Manhole
- Rubber Sleeve
- Pipe Strap Stainless
- Flexible Sleeve Cast
- Stainless Steel Ring Expanded
- In Place

- Precast Cast Concrete Manhole
- Rubber Gasket Cast
- Pipe Section
- Stainless Steel Strap

City of Derby - WPCA
PLASTIC MANHOLE STEP

MANUFACTURERS SPECIFICATIONS

1. MANHOLE STEPS SHALL BE INSTALLED PER
   NOTES:

SECTION A-A

STEEl REINFORCMENT

1/2" GRADE 60

1 3/8"

4

15 7/16"

1/4"

5 1/8"

1/4"

COPOLYMER POLYPROPYLENE PLASTIC

1 3/16"
N.T.S.

TYPICAL MANHOLE SLEEVE DETAIL

ALL STRAPS AND BOLTS TO BE STAINLESS STEEL

NOTE:

3/4" CRUSHED STONE BEDDING
0.6" MIN.

(CART. O.T. NO. 6)

CORE DRILL THROUGH

MANHOLE WALL

MANHOLE WALL

FULL LENGTH OF PIPE
PROPOSED SAN. PIPE

STAINLESS STEEL PIPE CLAMP
(KOR-N-SEAL OR APPROVED EQUIVALENT)

FLEXIBLE SLEEVE

STAINLESS STEEL CLOTH CLAMP
NOT TO SCALE

BUILDING CONNECTION DETAIL
LOW PRESSURE TO LOW PRESSURE

CURB STOP

SEWER MAIN

(\"SEWER\" VALVES)

TO GRINDER PUMP

1" HDPE

1-1/2" HDPE

CONNECT TO EXISTING 1-1/2" HDPE

REPLACE WITH HDPE COUPLING

DETECTABLE TRACER TAPE

APPROXIMATE PROPERTY LINE
LOW PRESSURE TO GRAVITY
BUILDING CONNECTION DETAIL

NOT TO SCALE

CONNECT TO EXISTING 1-1/2" HDPE
CUT AND REMOVE CAP
REPLACE WITH HDPE COUPLING

12"
TO GRINDER PUMP

1-1/2" HDPE

APPROXIMATE PROPERTY LINE
DETECTABLE TRACER TAPE

VALVE BOX (SEWER)

CURB STOP

6" PVC
SDR-35

GRAVITY SEWER MAIN

CITY OF DERBY - WPCA
NOTES:
1. ALL MANHOLE COMPONENTS TO BE AS SHOWN ON TYPICAL PRECAST MANHOLE DETAIL.
2. PROVIDE ADAPTERS, COUPLINGS AND FITTINGS AS REQUIRED.
3. ALL METAL FITTINGS AND HARDWARE TO BE 3/6 S.S.

LOW PRESSURE SEWER TERMINAL/FLUSHING MANHOLE
N.T.S.
PLAN

SECTION

NOTES:
1. ALL MANHOLE COMPONENTS TO BE AS SHOWN ON TYPICAL PRECAST MANHOLE DETAIL.
2. PROVIDE ADAPTERS, COUPLINGS AND FITTINGS AS REQUIRED.
3. ALL METAL FITTINGS AND HARDWARE TO BE 3/6 S.S.

LOW PRESSURE INLINE CLEANOUT MANHOLE
N.T.S.
1. See plans for approximate building connection locations.

2. Low pressure building connection to be installed as per manufacturer's requirements.

**NOTE:**

- **Low Pressure Sewer Main**
- **Heat But-Fluxed Tee**
- **1/1/2" HDP**
- **Pack Joint Coupling**
- **Valve Curb Stop With**
- **Sand All Around**
- **Minimum of 6"**
- **Detectable Tracer Tape**
- **4'-6" Min.**
- **12"**
- **Finish Grade**
- **Approximate Property Line**
- **Marking To Read "Sewer"**
- **Use Standard Valve Box**
- **To Grinder Pump**
- **1/1/2" HDP**
- **1 1/2" PVC Check Valve**
- **Provide Cap And Marker**
- **N.T.S.**
INSIDE DROP FORCE MAIN CONNECTION DETAIL

NOTES:

4. ALL METAL FITTINGS HARDWARE TO BE STAINLESS STEEL 316 SS

3. FOR PIPE UP TO AND INCLUDING 8", USE 6" DIAMETER MANHOLE

2. MANHOLE TO BE SIMILAR TO DIMENSIONS AND CONSTRUCTION OF
   SAME AS PIPELINE MATERIALS

1. DROP PIPE MATERIALS TO BE CONCRETE

GRAVITY SEWER

BRICK MASONRY

ANCHORS SPACED AT 2'-0" O.C.

1/4" X 2" ST. STL. STRAP

PRECAST CONCRETE MANHOLE

END PLUG

TEE

See Manhole Seal Detail

With 2" Min. Embedment (Typ.)

Two 1/2" Ø STL Exp. Bolts
NOTES:

1. Precast Concrete Manhole
2. Dimensions and Construction of Same as Pipeline Materials
3. For Pipe up to and Including 8" TP Manhole Except Where Shown
4. All Metal Fittings Hardware to Be 316 SS
5. Use 6" Diameter Manhole, over 8" Use 5" Diameter Manhole
6. Tee Manhole to Be Similar To
7. See Manhole Seal Detail

Concrete Fill
Gravity Sewer
Brick Masonry
Anchors Spaced at 2'-0" O.C.
1/4" x 2" Stainless Steel Strap
End Plug

90° Bend
With 2" Min. Embedment (Typ.)
Two 1/2" ø Stl. Exp. Bolts
Pipe
Typical Gravity Building Connection Detail

Section B

Unless otherwise directed, block connection, min. slope 1/4 ft/l.

Provide crushed stone, min.

Unsturbed material

Provide 2" x 2" oak marker

Detectable tape

Building connection, pavement limit for

Property line

NOTE

Of 45° bend, branch does not rub on, unaltered
Be sure that end of bell on WRE

Finished grade

Depth as directed

A

Section A

Unsturbed material

Crushed stone

Select backfill

Compacted backfill

A

Compacted class B

End plug

Length as directed

Plan

WRE branch

See Note

45° bend (rotate as required)

6" PVC SDR-35

WR branch
RECOMMENDED CONSTRUCTION SEQUENCE

1. INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS.
2. LOCATE EXISTING SANITARY SEWER PIPE(S) AT THE BUILDING, SEPTIC TANK(S) AND LEACHING FIELDS. DETERMINE INVERTS OF PIPE FROM BUILDING TO TANK.
3. VERIFY LOCATION OF GRINDER PUMP AS SHOWN ON THE PLANS. PROVIDE FOR A MINIMUM SLOPE OF 1/4" PER FOOT FOR CONNECTION TO THE GRINDER PUMP.
4. GRINDER PUMP RELOCATIONS TO BE VERIFIED BY THE ENGINEER AND/OR THE PROPERTY OWNER PRIOR TO INSTALLATION.
5. DETERMINE LOCATION OF LOW PRESSURE SEWER SERVICE AT PROPERTY LINE.
6. INSTALL LOW PRESSURE SEWER SERVICE, GRINDER PUMP AND PUMP CONTROL PANEL.
7. LOAM AND SEED AND SURFACE RESTORATION AS REQUIRED.
8. DO NOT DISTURB EXISTING SEPTIC TANK, PIPING, AND LEACH FIELD.
9. AT PROPERTY OWNER'S REQUEST, REVISE LOCATION OF GRINDER PUMP PRIOR TO INSTALLATION OF SERVICE CONNECTION. ANY REPLUMBING REQUIRED INSIDE THE HOUSE SHALL BE AT THE EXPENSE OF THE PROPERTY OWNER.

TYPICAL GRINDER PUMP INSTALLATION SITE PLAN
NOT TO SCALE
FORCE MAIN TRENCH DETAIL
N.T.S.
N.T.S.
TO MANHOLE DETAIL

TYPICAL FORCE MAIN CONNECTION

UNDISTURBED EARTH

CONCRETE FILL

GRAVITY SEWER

MANHOLE SEAL, SEE DETAIL

BRICK MASONRY INVERT

D2

6" MIN.

5" MIN.

0.8D1

0.8D2

MAX.

3'-3"

3'-0"

D1

OR AS SPECIFIED
ON CRUSHED STONE
CONCRETE MANHOLE BASE
PRECAST, REINFORCED

SIZE AND TYPE
SEE PLAN FOR
FORCE MAIN
NOTES

1. All manhole materials to be as shown on the.

2. All metal fittings hardware to be 316 SS.

Typical Precast Manhole Detail.

N.T.S.
NOT TO SCALE

DRain Service Connection Section

6" SCH 40 PVC

6" MIN.

Undisturbed Material

Crushed Stone

2" Compacted

Suitable Backfill Material
Bankrun Gravel or
Compacted in 6" Lifts

Coarse Sand or Fine Gravel

Utility Identification Tape

Filter Fabric Wrapped around

Crushed Stone (12" Min. overlap)

Restoration

Surface
DETAIL FOR EXISTING PIPELINE CUT AND CAPPED

EXISTING PIPELINE TO BE ABANDONED (Typ.)

REMOVING VOID FROM PIPE FILL & COMPACT

MIN. LENGTH = D' + 4.0'

CUT AND REMOVE EXISTING PIPE AS DIRECTED

FINISHED GRADE (SEE SPEC. FOR SURFACE RESTORATION)

RETAINING GLANDS (Typ.) CAP OR PLUG W/ WATER GUT

PIPELINE (Dia. = D')
SEWER, WATER OR DRAIN CROSSING DETAIL
N.T.S.
Concrete Arch and Cradle

1. If concrete encasement is required, concrete of minimum required thickness shall be placed around pipe. See Table A.

2. Limits of excavation to be placed compacted select backfill.

Material or sheeting against undisturbed material to be placed.

Concrete arch compacted in 12" lifts. Class B backfill placed & compacted in 12" lifts.

NOTE: Trench width (W)

Half section half section
NOTE:
FOR EXCAVATION, BEDDING & BACKFILL DETAILS, AND FOR PAYMENT LIMITS NOT SHOWN, SEE SEWER TRENCH DETAIL. FOR W1, W2, DP1, & DP2, SEE TABLE A.

COMMON TRENCH
EXCAVATION AND MATERIAL LIMITS
N.T.S.
CHIMNEY BUILDING CONNECTION
DETAIL FOR SEWER

NOTE:
AT THE CONTRACTORS OPTION, HE MAY ELECT TO USE DI PIPE INSTEAD OF PVC AT NO ADDITIONAL COST TO THE OWNER. IF DI PIPE IS USED, THE DI PIPE SHALL EXTEND 12" BEYOND THE EDGE OF THE MAINLINE TRENCH AND BE FITTED WITH A PVC ADAPTER.
<table>
<thead>
<tr>
<th>TABLE A</th>
</tr>
</thead>
<tbody>
<tr>
<td>(7\frac{1}{2}'')</td>
</tr>
<tr>
<td>(6'')</td>
</tr>
<tr>
<td>(7\frac{1}{2}'')</td>
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<tr>
<td>(6'')</td>
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<tr>
<td>Minimum Clearance (W)</td>
</tr>
<tr>
<td>(\text{Invert Depth to Pipe})</td>
</tr>
</tbody>
</table>
FINISH GRADE

CLASS B BACKFILL PLACED & COMPACTED IN 12" LIFTS

FULL EXCAVATED WIDTH

TRENCH WIDTH

3'-0"

PIPE SPRING LINE

BENTONITE/SAND MIXTURE 18" MINIMUM LENGTH ALONG PIPELINE

NOTES:
1. DAM TO BE PLACED AGAINST UNDISTURBED MATERIAL OR SHEETING
2. SEE TABLE A FOR S & DP DIMENSIONS

BENTONITE DAM DETAIL

N.T.S.
MH F&C PER SPEC.
SLOPE 1" FOR 1'
FINISHED GRAVEL ROAD GRADE

CASTING UP 1/8" ABOVE PAVEMENT
GRAVEL OVER TYPE 1 MIX

MORTAR CAP ALL AROUND
BRICK CASTING ADJUSTMENT AS REQUIRED

SECTION
N.T.S.

12'-0"
SLOPE 1'

12'-0"
SLOPE 1'

2" DEPTH TYPE I BITUMINOUS CONCRETE PAVEMENT

PLAN
N.T.S.

NOTE:
NOT TO BE USED ON ROADS WITHIN FLOOD PLAIN AREA

ASPHALT PAD AROUND MANHOLES ON GRAVEL ROADS
N.T.S.
4'-0" DIA. MANHOLE PLAN
N.T.S.

ADJUST TO REQUIRED GRADE
WITH A MIN. OF ONE COURSE
AND A MAX. OF FIVE COURSES
OF BRICK MASONRY OR
REINFORCED CONC. GRADING
RINGS, ALL BRICKS TO BE
LAID AS HEADERS

2'-0" UNLESS OTHERWISE INDICATED

PRECAST CONCRETE
MANHOLE CONE

BUTYL RUBBER JOINT
SEALANT (TYP)

REINFORCING STEEL (TYP)

PRECAST CONCRETE
MANHOLE RISER

MANHOLE STEPS

5" MIN

4'-0" DIA.

PRECAST CONCRETE
MANHOLE BASE

BRICK MASONRY INVERT

CONCRETE FILL

CRUSHED STONE

6" MIN.

UNDISTURBED MATERIAL

6" MIN.

1" WASH (TYP)

0.8 XD

TYP. STUB
WITH PLUG

MANHOLE SEAL
SEE DETAIL

COMBINATION OF
1.2.3 OR 4'
LENGTHS

6" INCREMENTS

2" TO 5" IN

8" MIN.

MORTAR ALL AROUND

MANHOLE FRAME & COVER
FINISHED GRADE

LIMIT FOR MANHOLE WALLS AND CONES

CITY OF DERBY - WPCA