

PART 1

STANDARD PRACTICES AND PROCEDURES

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Section 1 – SUBMISSION OF PLANS AND SPECIFICATIONS

a. Prior to the District issuance of a Sewer Connection Permit, plans and specifications must be submitted for review and approval to the District's Engineering and Planning Department at 555 Main Street, Hartford, Connecticut. The District will determine whether an existing main sewer needs to be extended or whether a sewer house connection as defined below, will suffice.

b.1. A main sewer extension is a public sewer sometimes constructed by developers but turned over to the District upon completion. A sewer lateral is any branch extending from the main sewer to the street line fronting the property. Main sewer extensions may be installed under a Developer's Permit Agreement (DPA). All DPA's are managed through Engineering Services at 555 Main Street, Hartford, Connecticut 06142.

b.2. A sewer house connection is laying pvc or ductile iron pipe from the lateral at street line to the building to be served. A sewer house connection shall be installed after applying for a sewer house connection permit managed through Utility Services at the South Meadows Service Center, 60 Murphy Road, Hartford, Connecticut 06114.

c. When a sewer or drain connection is proposed from any new building, a suitable plot plan must be submitted to the District. Such plan should have complete dimensions, the location of the lot on the public street, the location of the building on the lot, the house number, or the lot number, the metes and bounds of the lot and its location with respect to the nearest side street, the owner's (not builder's) name and address, the type of occupancy of the premises and number of family units to be served by the sewer connection.

In the case of a proposed sewer or drain connection from an industrial building, commercial building, apartment house or any building other than a normal residential building or for parking areas for more than five cars, the District must be provided with a suitable plan of drainage and the proposed method of connections of sanitary sewage and storm drainage to the public sewer or storm drain. Such plan must be submitted to the District prior to the time when the Sewer Connection Permit is needed in order to allow the District sufficient time to review the proposed installation.

Storm drainage plans in Hartford must (1) be submitted to and approved by the District for acceptance of proposed construction, (2) be submitted to and approved by the City of Hartford License and Inspection Department for approval of adequacy of drainage, and (3) be returned to the District for final approval of the plan and issuance of necessary permits.

d. Where the sewer may possibly be subjected to prohibited wastes, such as oil, grease, gasoline, sand, grit, etc., as shall be determined by the District, the plan must show the installation of an approved oil or grease separator and/or sand-grit trap on the sanitary plumbing. Plans and specifications of all industrial waste pretreatment facilities must be approved by the State of Connecticut Department of Environmental Protection prior to issuance of a Contractor's Sewer Connection Permit from the District. A State Department of Environmental Protection discharge permit must be issued prior to discharge of wastewater to the sanitary sewer system.

e. All plans must have the seal of a Connecticut licensed professional engineer or surveyor.

f. The engineer, making plans for new buildings or for parking areas for more than 5 cars in Hartford, is advised to check the latest planning and zoning ordinances of the City of Hartford regarding engineering design. Footing drains must go to a sump prior to connection to the drain outside the building. Catch basins must be placed to adequately drain the area.

g. The checklist included herein has been developed to aid engineers, consultants and property owners in the preparation of sewer-drainage plans. The District must approve the plans prior to issuance of a Sewer Connection Permit for a Sanitary Sewer - Storm Drain Connection to any new commercial or industrial building or residential apartment of more than three family units.

SEWER-DRAIN CONNECTION CHECK LIST

Plan:

___ Drawn to scale using NGVD 1929 datum.

___ Size, type of pipe and grade of existing public main sanitary sewer, combined sewer and/or main storm drain.

___ Type, location and elevation of wye, stub, lateral or other point of connection. Describe method of connection if opening is not provided.

- ___ Pipe type, size, grade and cover of sanitary sewer or storm drain house connection. Minimum size pipe is 6-inch ductile iron or plastic and 12-inch for reinforced concrete. Minimum grade is 1%. Plastic pipe shall be used for the sanitary sewer connection to an industrial building, in an industrial zone or where there are industrial wastes.

- ___ Size and flow line elevations of all cast iron or plastic plumbing pipes shown at point of connection with sanitary sewer or drain line house connection pipe (3 to 5 feet outside building foundation). All plumbing to a point 3 to 5 feet outside the foundation is under municipal building jurisdiction.

- ___ Top of frame and flow line elevations of all structures shall be shown.

- ___ Pipe should be at an adequate depth and in a location which will clear other utility lines or structures.

- Note: Depth of cover over all pipes should be shown. In an area where existing ground surfaces will be altered, such as new paved or lawn areas, cover shall be no less than 4 feet to finished grade. In an area already developed, the cover shall be reduced to a minimum of 3 feet and if reinforced concrete or (ductile iron) pipe is used the cover may be reduced 1 additional foot.

- ___ Pipe should be at a minimum distance of 25 feet from any water well.

- ___ Trench restoration for possible rock, high ground water table or sheeting left in place in area of excavation?

- ___ Is building at a low elevation requiring sewage to be pumped and have approved plans and specifications been submitted?

- ___ No permanent structure encroachment on any District sewer, drain or water right-of-way.

- ___ Is existing sewer in right-of-way on land of others where notification to owner is necessary?

- ___ Does house connection cross private lands of others where right-of-way easement is required? If so, a legal agreement must be prepared and signed.

- ___ Number of family units for all residential buildings. Owner and mailing address of property. Type of occupancy for all other buildings.

For Condominiums:

- Does each dwelling unit have separate sewer connection?
- Are multiple dwelling units connected to one sewer connection?
- Are dwelling units at various elevations?
- Is an alarm system required to warn in the event of a sewer backup?

For Apartments:

- Number of dwelling units noted for each building.
- Adequate layout and clean outs on plumbing and/or sewer line to provide accessibility for rodding.
- Is connection to be made to a swimming pool drain and/or pool filter backwash drain? If so, plans and specifications must be submitted to the District for approval.

For Commercial, Industrial or other Buildings (such as automotive repair or washing, shops, gas stations, hospitals or convalescent homes, hotels, laundry facilities, machine shops, restaurants, schools, churches and club houses):

- Are there petroleum oil, gasoline and grease wastes and is an approved oil-grease separator to be installed on all floor drains for proper pre-treatment and separation?
- Are there sand and grit wastes and is an approved sand trap to be installed on all floor drains for proper treatment and separation?
- Are there chemical or metal wastes and are there approved pre-treatment and separation facilities to be installed? Has the State Department of Environmental Protection approved a pretreatment permit?
- Are there kitchen grease wastes from dishwashers, pot sinks and any other drains subjected to objectionable kitchen waste and is an approved grease separator to be installed at an approved location for proper pre-treatment and separation?

Note: The separator shall be of adequate size and at a sufficient distance (25 feet \pm) away from the dishwasher to trap the hot grease wastes. If determined necessary by the District, the grease separator, for restaurants, cafeterias, snack bars and buildings with similar facilities, shall be installed on a separate plumbing line to a point at least 5 feet outside the building so that any additional installation of protective devices may be made if necessary.

The make, model and capacity of the separator should be noted.

- Plastic pipe only for sanitary sewers should be noted on the plan.
- Number of patient rooms shown in floor plans for all hospitals and convalescent homes.
- If required, have plans been approved by the State Department of Environmental Protection and/or Health Department.
- Other utilities are required to be shown on sewer drainage plans. It is assumed during design that the engineer has avoided any conflict with other utility lines or structures.
- The District will determine if there is a monetary charge due and agreement necessary.
- Is main sewer or drain approved for connections? active; capped
- Are town street and/or State Highway excavation permits required for work within public streets?
- Is Drain Layer Contractor eligible for permits (license, bond and insurance)?
- Plans and Specifications approved by Town Building and Health Department and State Department of Environmental Protection?

In Hartford:

Catch basins must be trapped in all instances where line drains to a combined sewer and in some instances where line drains to a storm sewer.

- Is there a footing drain connected to a sump?
- A sump and trap with a 2 feet minimum depth, must be constructed in the first catch basin upstream of the point of connection with the public sewer or drain.

- ___ Plan must be sealed by a Connecticut licensed professional engineer.
- ___ Storm drainage plan must have the stamped approval of the City Department of Licensing and Inspections.

Section 2 – CONTRACTOR’S APPLICATION, BOND, AND INSURANCE

- a. In order to be permitted to install sewer connections to the District sanitary system, the Drain Layer Contractor shall submit a completed Application for Eligibility, Bond and Insurance, which information will be kept on file for future reference.
- b. The Application for Eligibility form must indicate that applicants possess proper state licensing. A valid state license (P-1, P-2, P-6 or P-7) is required prior to obtaining a sewer connection permit. Authorized individuals representing the licensee are required to sign permit forms. See Appendix A.
- c. Prior to the District issuing any permit for sewer or drain work, the licensed Drain Layer Contractor shall present the required permit for street excavation from the proper local and state authority and the Call-Before-You-Dig ticket number.
- d. If the proposed sewer work is within the limits of any State Highway, the Drain Layer Contractor shall also present the required excavation permit from the Connecticut State Department of Transportation before receiving the required sewer permit from the District.
- e. The Contractor's Bond shall be executed by the surety company's agent, including the name of the contractor, name of responsible state licensee, name of surety and proper signatures. See Appendix B.
- f. The Certificate of Insurance shall include coverage's for General Liability with the Metropolitan District added as additional insured, Automotive Liability, Protective Liability in the name of the Metropolitan District (with the policy) and Workers' Compensation and Employers' Liability. The amount of insurance coverage shall meet the prevailing minimum requirements and be presented on the District's Certificate of Insurance. See Appendix C.
- g. Sewer Connection Permits will only be issued once all forms are completed and approved by the District for eligibility, bond, insurance and after all assessment costs, if any, are paid or time payment plan and voluntary lien are completed by the property owner. See Appendix D.

Section 3 - SAFETY

a. The Drain Layer Contractor shall comply with all pertinent provisions of the Department of Labor, Occupational Safety and Health Administration, Title 29 Code of Federal Regulations Chapter XVII Parts 1910 – “General Industry Standards” and Parts 1926 – “Construction Industry Standards”. The Contractor shall also comply with Building Code requirements of the State of Connecticut.

b. The Drain Layer Contractor alone shall be responsible for the safety, efficiency and adequacy of its plant, appliances and methods, and for any damage or injury which may result from their failure or the improper construction, maintenance or operation.

c. The Drain Layer Contractor shall properly design and furnish all labor, materials, equipment, and tools necessary to completely construct the excavation support system, permanent or temporary, including sheet piling, trench shields (trench boxes), timber trench shoring, pneumatic/hydraulic shoring, steel sheeting or sheeting using other materials, sloping and benching. All of the proper materials and all equipment necessary to protect employees in excavations against cave-ins shall be furnished and installed. Also, all employees and the general public shall be protected from hazards related to the construction. Adequate excavation support systems shall also protect people from equipment which might fall or roll into an excavation, utilities within or adjacent to the excavation or which is impacted by operations under the construction.

d. If, in the opinion of the District, the Drain Layer Contractor has failed to maintain a safe trench and work area, District forces shall refuse to enter the trench until safety concerns are satisfied. This requirement should not in any way relieve the Drain Layer Contractor of complete responsibility and liability for maintaining a safe and adequate trench excavation at all times and at any depth.

Section 4 - EXCAVATION

a. Capped sewer wyes and laterals laid since about 1950 are usually marked with wood markers left in the ground extending from a point directly in front of the capped wye, or lateral to a point about four feet below the ground. These markers were placed to aid the Drain Layer Contractor in locating the point of connection more closely and thus avoid damage to the public sewer from excavating procedure.

b. The Drain Layer Contractor shall fully comply with the State of Connecticut Public Act No. 77-350 in regards to the proper notification to be given the Call-Before-You-Dig central clearinghouse 1-800-922-4455 prior to any excavation, discharging explosives or demolition and to all other actions concerning work near underground utility facilities. Excavators are reminded to read the previous section on safety.

Section 5 - CONNECTION OF BUILDING PLUMBING

The building plumbing pipe shall not be connected to the sewer house connection until the tight building plumbing is complete or until the length of building plumbing pipe under or through the foundation is tightly capped, or until the District is satisfied that the building plumbing, if not completed, is so constructed to prohibit the discharge of subsoil drainage, surface, or subsurface storm or muddy water from entering the sanitary sewer system.

Section 6 - INSPECTION

a. Upon substantial completion of the work but prior to connection, the Drain Layer Contractor shall telephone the South Meadows Service Center, 60 Murphy Road, Hartford, to request an inspection. The Drain Layer Contractor shall refrain from removing the cap or breaking into any existing pipe to make the connection or to commence laying pipe or building structures until the inspector gives his/her approval.

b. In the case of repairs, the Drain Layer Contractor shall allow the District Inspector to observe the disrepair before removal of any pipe. Before making repairs, the Drain Layer Contractor shall ensure that the remaining connection in both directions is in good condition and free from obstruction.

c. Inspections outside the hours of the normal 5-day workweek must be pre-arranged and a fee shall be paid to the Metropolitan District at its office at 60 Murphy Road.

If an “emergency” condition exists, where a contractor must make repair immediately, the District inspector will be dispatched. Under “emergency” conditions, the inspector must be at the work site prior to the sewer house connection pipe being opened. The Inspector will determine if the back up is an emergency situation. If it is determined that the repair must be made immediately, the District Inspector will inspect the repair. If the Drain Layer Contractor is relaying the entire sewer house connection on the owners part, the District Inspector will inspect the initial connection at the street line. The Drain Layer Contractor may continue to install the sewer house connection but must leave open the portion of the house connection that is connected to the house plumbing. The Drain Layer Contractor is to call the South Meadows Service Center at the opening of the following business day and request a final inspection. If the District Inspector determines that an emergency situation does not exist, then an after hours inspection fee must be paid for inspection services.

d. After the cap is removed at the point of connection to the public sewer, the Drain Layer Contractor should make certain by probing, rodding, or by use of flashlight that the pipe from the capped end to the public sewer is in good condition and free from obstruction. If the lateral is found to be obstructed or in bad condition, the Drain Layer Contractor should refrain from making any connection thereto until the District Inspector has advised further procedure.

e. After the District Inspector has approved the initial construction of the house connection pipe, under this section, the Drain Layer Contractor may complete the house connection pipe construction, but shall not backfill the area of trench around the joint with the building plumbing pipe and shall leave the pipe uncovered until such time as this joint has been finally inspected and approved by the District. Arrangements should be made, on site, between the District Inspector and the Drain Layer Contractor for the final inspection. If the connection is not approved, the Drain Layer Contractor shall make the necessary corrections and request further inspection.

f. Sewer connections serving buildings to be demolished or relocated shall be properly bulkheaded at the street line or other point approved by the District. This bulkheading must be done by a licensed Drain Layer Contractor under District permit prior to demolition of the building.