

**CHAPTER 152.****PUBLIC HEALTH (SEWERAGE AND DRAINAGE).**

No. 40-1953. **AN ORDINANCE TO MAKE PROVISION FOR THE PRESERVATION OF**  
 No. 7-1955. **PUBLIC HEALTH BY MEASURES OF SEWERAGE, DRAINAGE**  
**AND SANITATION GENERALLY.**

[14th October, 1953.]

Short title. 1. This Ordinance may be cited as the Public Health  
 (Sewerage and Drainage) Ordinance.

**PART I.****PRELIMINARY.**

Interpreta- 2. In this Ordinance unless the context otherwise  
 tion. requires :

“benching” means the sloped floor of a manhole on both sides of and above a channel ;

“British Standard” means the relevant and current specification of the British Standards Institution of the article or material to which reference is made ;

“cement” means cement complying with British Standard 12, ordinary Portland and rapid hardening Portland cement ;

“manhole channel” means the open waterway through which the effluent flows at the invert of a manhole ;

“coarse aggregate” means natural gravel, crushed gravel and crushed stone complying with British Standards 882, 1198, 1199, 1200, 1201, concrete aggregates and building sands from natural sources ;

“concrete” means concrete of not less strength than that obtained by thoroughly mixing one part by volume of cement, two-and-a-half parts by volume of suitably graded fine aggregate, five parts by volume of suitably graded coarse aggregate, with just sufficient clean water to secure due workability and conveyed and compacted in its final setting position with a minimum of delay, after such mixing ;

“cover” means the vertical distance from the ground level to the top of a buried pipe ;

“drain” means any pipe (and includes all bends, tapers and junctions used in connection therewith) not being a rainwater pipe nor a soil pipe nor a waste pipe, nor a waste water pipe provided for the purpose of conveying from any building or group of buildings lying within the same curtilage :—

(a) foul water and or waste water and or trade effluent to a foul water sewer or to a lateral drain connecting with a foul water sewer or to a cesspool or to a septic tank, or,

(b) surface water to a watercourse or to a tank or to a soakaway ;

“drainage” means the construction, repair, alteration, maintenance or removal of any drain or any lateral drain or any sewer or of any manhole thereon or any cesspool or septic tank or of any watercourse or soakaway or of any soil pipe or ventilating pipe or waste pipe or waste water pipe or fitting in connection therewith or of any gutter or rainwater pipe or fitting in connection therewith or of any urinal, water closet, earth closet, pail closet, slop sink, lavatory basin, bath and the like or of any gully trap, anti-siphonage pipe or fitting or cistern in connection therewith or of any water storage tank used for collecting surface water from a building or its curtilage ;

“drop connection” means a drain of which the last length before its connection to a manhole or sewer is vertical ;

“ dual system ” means the system of conveying foul water from a building whereby a soil pipe conveys soil directly and untrapped to a drain and a waste water pipe conveys waste water to a drain by discharging it into or over a gully trap the soil pipe and the waste water pipe not being interconnected ;

“ earth closet ” means a closet for the reception of faecal matter into a movable receptacle in which such matter is deodorised by admixture with earth, ashes, sand, chemicals and the like ;

“ fine aggregate ” means natural sand, crushed gravel and crushed stone complying with British Standards 882, 1198, 1199, 1200, 1201, concrete aggregates and building sand from natural sources ;

“ foul water ” means any water contaminated by soil, waste water, trade effluent or other cause ;

“ grease trap ” means a type of gully trap constructed for the retention and removal of grease, petroleum spirit or similar matter from waste water ;

“ gully trap ” means an appliance for receiving waste water or surface water and passing it to a drain, lateral drain or sewer or for receiving surface water and passing it to a drain or watercourse and provided with a trap to prevent the passage of any gases through the trap ;

“ gutter ” means a channel for the collection and conveyance of surface water ;

“ haunching ” means concrete laid under and at the sides of a drain ;

“ high alumina cement ” means cement manufactured by fusing aluminous and calcareous materials to a completely molten state and grinding the resulting clinker all so as to comply with British Standard 915 high alumina cement ;

“ interceptor ” means an appliance for intercepting the flow of any gas along a drain ;

“invert” means the lowest point of the interior of a sewer or drain at any cross section ;

“joinder junction” means a junction so manufactured as to be sealed until it is required to be put into use ;

“junction” means a pipe incorporating one or more branches ;

“lateral drain” means that portion of the drainage which lies between a foul water sewer or a cesspool or a septic tank and a drain and forming part of the public sewerage system ;

“latrine” means an earth closet, a pail closet or a water closet ;

“manhole” means any chamber constructed on a drain or on a lateral drain or on a sewer so as to provide access thereto for inspection, testing or the clearance of obstructions and will be referred to as a drain manhole, lateral drain manhole, sewer manhole, respectively. The outfall manhole in a water drainage system means the last manhole within the owner's curtilage before the connection to the sewer, lateral drain or septic tank ;

“manhole channel” means the open waterway through which the effluent flows and the invert of a manhole ;

“mortar” means mortar of not less strength than that obtained by thoroughly mixing one part by volume of cement, three parts by volume of suitably graded fine aggregate with sufficient clean water to secure due workability and laid on a damp surface in its final setting position with a minimum of delay after such mixing ;

“one pipe system” means the system of conveying foul water from a building whereby a soil pipe conveys soil and waste water directly and untrapped to a drain ;

“ pipe ” means a hollow cylinder of uniform internal diameter or an egg shaped tube of uniform thickness throughout its length except for the joint and in the case of —

(a) pipes used for drains, shall consist of pipes and fittings complying with the undermentioned standards, or such other pipes and fittings which the Sewerage Authority may permit to be used —

(i) British Standard 486 for asbestos pressure pipes, or

(ii) British Standard 78 for cast iron pipes (vertically cast) for water, gas and sewage and special castings for use therewith, or

(iii) British Standard 437 for cast iron spigot and socket drain pipes, or

(iv) British Standard 1211 for centrifugally cast spun iron pipes, or

(v) British Standard 556 for concrete cylindrical pipes and fittings, or

(vi) British Standard 540 for salt-glazed glass (vitreous) enamelled fire clay pipes including taper pipes, bends and junctions, or

(vii) British Standard 65 for salt-glazed ware pipes including taper pipes, bends and junctions, or

(viii) British Standard 534 for steel spigot and socket pipes and specials for water, gas and sewage ;

Where applicable the foregoing pipes shall comply with British Standard 539 dimensions of drain fittings salt-glazed ware and salt-glazed glass (vitreous) enamelled fire-clay and with British Standard 1130, schedule of cast iron drain fittings, spigot and socket type ;

(b) pipes used for ventilating pipes, waste water pipes and soil pipes, shall consist of pipes and fittings

complying with the undermentioned standards, or such other pipes and fittings which the Sewerage Authority may permit to be used —

(i) British Standard 582 for asbestos cement spigot and socket soil, waste and ventilating pipes and fittings, or

(ii) British Standard 416 for cast iron spigot and socket soil, waste and ventilating pipes, and fittings and accessories ;

(c) pipes used for rainwater pipes and gutters and fittings in connection therewith shall consist of pipes, gutters and fittings complying with the undermentioned standards, or such other pipes, gutters and fittings which the Sewerage Authority may permit to be used —

(i) British Standard 569 for asbestos cement spigot and socket rainwater pipes, gutters and fittings, or

(ii) British Standard 460 for cast iron spigot and socket rainwater pipes, fittings and accessories, or

(iii) British Standard 1205 for cast iron gutters, fittings and accessories, or

(iv) British Standard 1091<sup>†</sup> for pressed steel gutters, pipes, fittings and accessories, or

(v) British Standard 1430 for aluminium rainwater goods cast and extruded, or

(vi) British Standard 1431 for wrought copper and wrought zinc rainwater goods ;

“rainwater pipe” means any pipe, gutter or fitting fixed on or in any building and used for the purpose of conveying surface water from such building ;

“septic tank” means a tank or receptacle for the reception of sewerage or foul matter for the effluent from which the submerged outlet is provided ;

“ sewer ” means any pipe used for the conveyance of soil, waste water and trade effluent and not covered by the definition of drain, lateral drain, soil pipe, ventilating pipe, waste pipe or waste water pipe ;

“ sewerage area ” means an area declared to be a sewerage area under and for the purposes of this Ordinance ;

“ sewerage authority ” means any public authority having jurisdiction over any sewerage area or such other authority as the Governor may, by notice in the *Gazette*, declare to be a sewerage authority for the purposes of this Ordinance ;

“ slop sink ” means a sink intended for receiving solid or liquid filth ;

“ soakaway ” means a pit suitably prepared to receive liquid for seepage into the surrounding ground ;

“ soil fitment ” means any water closet pan, urinal or slop sink used for receiving any excremental matter ;

“ soil ” means the discharge from water closets and urinals and from gully traps serving stables, cowsheds, slaughter-houses and garages and similar appliances ;

“ soil pipe ” means any pipe fixed on or in any building for the purpose of conveying soil from a soil fitment to a drain ;

“ subsoil drain ” means any pipe or open channel designed or used for the removal of subsoil water ;

“ surface water ” means the run-off of natural water from the surfaces of roofs, paved areas and ground which is uncontaminated with foul water ;

“ system of drainage ” means the system by which the foul water is conveyed to sewers, lateral drains, or septic tanks or to some approved place of deposit or burial or by which surface water is conveyed to a water-course or to a soakaway or to a tank ;

“trade effluent” means the liquid discharge other than soil and waste water from any manufacturing process ;

“ventilating pipe” means any pipe provided for the ventilation of a sewer, lateral drain, drain, soil pipe or of a waste water pipe ;

“waste fitment” means any bath, lavatory basin or similar appliances ;

“waste pipe” means a pipe provided for the purpose of conveying waste water from a waste fitment directly to a waste water pipe, soil pipe, or gully ;

“waste water” means used water from a waste fitment ;

“waste water pipe” means a pipe used above ground and fixed on or in a building for the purpose of conveying waste water from waste pipes to a soil pipe or gully ;

“water closet” means latrine accommodation other than a urinal used, adapted or intended to be used for conveying human excreta in connection with a water carriage system ;

“watercourse” means any river, stream, ditch or conduit including conduits constructed for the drainage of highways which is used for the conveyance of surface water.

3. The Governor in Council may by order declare any area of the Colony defined in such order to be a sewerage area for the purposes of this Ordinance.

Declara-  
tion of  
sewerage  
area.

4. (1) Subject to the provisions of section 5 of this Ordinance the Governor in Council may appoint a Sewerage Authority for any sewerage area, and until such appointment be made for any area, the Colonial Engineer shall be the Sewerage Authority for that area.

Appoint-  
ment of  
Sewerage  
Authority.

(2) Notwithstanding the provisions of any other law, all public sewers within a sewerage area shall be vested in the Sanitary Authority upon the declaration of such area, unless or until some other person or authority is appointed the Sewerage Authority for the said area, when they shall thereupon vest in such Sewerage Authority.

(3) The powers and duties of a Sewerage Authority under this Ordinance may be exercised and performed by the officers and servants of the Sewerage Authority or any person or persons or body of persons generally or specially authorised by the Sewerage Authority, to the extent of any such general or special authority.

Castries  
Town  
Council  
to be  
Sewerage  
Authority  
for Castries  
and within  
half a mile  
from limits  
thereof.

5. (1) The Castries Town Council shall be the Sewerage Authority for the sewerage area comprising the Town of Castries and a distance of half a mile from the limits thereof and the public sewers within the said sewerage area shall be vested in the Council who shall as such Sewerage Authority manage and supervise the sewerage and drainage system thereof and generally carry into effect the provisions of this Ordinance with respect to the said sewerage area: Provided always that it shall be lawful for the Governor in Council to appoint one or more Commissioners, not members of the Town Council, to hold an inquiry into the condition of the sewerage and drainage system and into the manner in which the provisions of this Ordinance have been carried into effect by the Sewerage Authority, and the said Commission shall report in writing to the Governor, and the said report shall be laid before the Legislative Council. The said Commission shall have the right to examine all documents, plans and accounts belonging to the Sewerage Authority in connection with the sewerage and drainage system and to carry out any experiments or tests that may in its opinion be desirable. The Sewerage Authority shall afford the said Commission all information that it may desire, and the cost of such inquiry shall be paid by the Sewerage Authority.

(2) If the Sewerage Authority in the opinion of the Governor in Council persistently makes default in the performance of the duties or exceeds or abuses the powers

assigned to it under this Ordinance, or fails or refuses to carry out any recommendations which may from time to time be made by the Governor in Council as the result of any report under this section, the Governor in Council may, by order to be published in the *Gazette*, cancel the appointment of such Sewerage Authority and appoint another Sewerage Authority.

## PART II.

## GENERAL MATTERS CONCERNING THE PROVISION OF DRAINS.

6. All buildings or extensions to buildings which are completed after the coming into operation of this Ordinance shall, in all cases where it appears to the Sewerage Authority that the building and or its extension is or is likely to be used as a place of human habitation or as a place of habitual employment or as a place of public entertainment or as a place of refreshment or as a place of public instruction or as a place of worship, be provided with a satisfactory system of drainage as defined in section 8 hereof.

Drainage of  
new  
buildings.

7. Where it appears to a Sewerage Authority that a building or part of a building which was completed before the coming into operation of this Ordinance and which is within the sewerage area coming under the jurisdiction of such sewerage authority, is without a satisfactory system of drainage as defined in section 8 hereof and that for the proper maintenance and preservation of public health and convenience such a system of drainage should be provided, then the Sewerage Authority may by notice, require the owner or the owners of such building or the owner or owners of the land upon which the building is constructed or both as the case may be to provide a satisfactory system of drainage for the building as defined in section 8 hereof and shall state in such notice the period of time within which such a system of drainage shall be completed ready for use.

Drainage of  
existing  
building.

8. For the purposes of sections 6 and 7 of this Ordinance a satisfactory system of drainage shall be deemed to exist :—

Satisfactory  
system of  
drainage.

(1) In respect of foul water —

(a) where a foul water sewer or a lateral drain of sufficient depth lies within a distance not exceeding one hundred feet from the curtilage of a building and all foul water is conveyed from the curtilage of the building to a foul water sewer or lateral drain by a drain constructed in accordance with the requirements hereinafter contained, or

(b) where a foul water sewer or lateral drain of sufficient depth does not exist within a distance not exceeding one hundred feet from the curtilage of the building and is unlikely to exist within a period of three months from the date of completion of a system of drainage which might otherwise connect to a sewer, the foul water from such a system of drainage is disposed of by one of the following methods :—

(i) by conveyance to a foul water sewer by a drain or by a lateral drain constructed by the Sewerage Authority in accordance with the requirements hereinafter contained ;

(ii) by conveyance to a septic tank by a drain all constructed in accordance with the requirements hereinafter contained ;

(iii) by the provision of a pail closet or of an earth closet constructed in accordance with the requirements hereinafter contained and where the Sewerage Authority is satisfied that a suitable place for the deposit or burial of the contents of the receptacles of such pail closet or earth closet is available within a reasonable distance of the building ;

(iv) by the provision of a pail closet constructed in accordance with the requirements contained in regulation 18 in the First Schedule hereto where the Sewerage Authority is satisfied that arrangements for depositing the contents of the receptacle of such pail closet into a foul water sewer through

a collecting hopper provided for such purpose are available within a reasonable distance in a locality prescribed for such hopper by regulations made under this Ordinance :

Provided always that no uncontaminated surface water or subsoil water shall be permitted to discharge into any foul water sewer.

(2) In respect of surface water —

(a) where the surface water is not collected for use and is conveyed from a building and its curtilage to a watercourse or, with the permission of the sewerage authority, to a soakaway by a drain or open channel constructed in accordance with the requirements hereinafter contained, or

(b) where the surface water is collected for the use of a building (such surface water being stored in a proper covered receptacle) and provision is made for the conveyance of any surface water overflowing from such receptacle away from the said building and its curtilage into a watercourse or to a soakaway by a drain or open channel constructed in accordance with the requirements hereinafter contained :

Provided always that no surface water shall be permitted to become static other than in a proper covered container and all depressions on the building or on its curtilage which would enable surface water to collect and remain static shall be removed. No foul water shall be permitted to gain access to any watercourse or to any soakaway.

(3) For the purposes of this Ordinance a system of drainage shall be deemed to have been completed on such date as may be prescribed by Order made by the Governor in Council.

(4) The power conferred by the preceding subsection shall include the power to make an order prescribing the date of completion of a part of a system of drainage.

Failure of owner to provide a satisfactory system of drainage.

9. (1) Where any person constructs a new building or extends an existing building without providing a satisfactory system of drainage where such provision is required under section 6 hereof or where any person being the owner of an existing building fails to comply with the requirements of the Sewerage Authority to make provision for a satisfactory system of drainage for such building as required under section 7 hereof or where such a person fails to maintain an existing system of drainage in a satisfactory manner then the Sewerage Authority shall by notice require the owner or the owners of such building to provide or to restore a satisfactory system of drainage for the building as defined in section 8 hereof and shall state in such notice the period of time within which such a system of drainage shall be completed ready for use and shall indicate that in default of the owner or owners to provide such a system the Sewerage Authority will itself execute the necessary work at the expense of the owner or owners aforesaid and that the provisions of section 10 of this Ordinance for securing repayment of the expenses thereby incurred will become applicable to him or them.

(2) The form of notice required under this section shall be in the Form A in the Second Schedule hereto.

(3) A copy of the said notice shall at the same time as it is served on the owner of a building be registered with the Registrar of Deeds and Mortgages who shall enter the same in the appropriate volume of the Register Book.

Compulsory execution of works by Sewerage Authority and payment therefor.

10. (1) Subject to the right of appeal provided in section 11 of this Ordinance if the owner of any premises has failed to provide a satisfactory system of drainage after a notice has been served on him pursuant to section 9 hereof, or if it shall appear to a Sewerage Authority that the owner of any premises should carry out certain drainage works to such premises but is unlikely to be able to make a present payment of the amount of the expenses necessary to be incurred for the drainage of such premises, then the Sewerage Authority may, subject to any general or special agreement with such owner, itself carry out the said works and the expenses thereby incurred with interest thereon (if any) computed from the

date of completion of the said works shall form a charge having the effect of a legal hypothec against the said premises, and such hypothec shall have priority as from the date of registration of the notice in the Form A referred to in the preceding section. The hypothec hereby created shall be deemed to extend to any expenses lawfully paid to the Registrar of Deeds and Mortgages in connection with the registration or withdrawal of the hypothec in pursuance of the other provisions of this section.

(2) The hypothec created by subsection (1) of this section shall be in favour of the Sewerage Authority and the Sewerage Authority shall have all the powers and remedies conferred on mortgagees by any law for the time being in force.

(3) The Sewerage Authority shall, prior to the commencement of any work the cost or, where the actual cost is not known, the estimated cost of which will constitute a hypothec on the premises on or in respect of which the same is done, serve on the Registrar of Deeds and Mortgages a notice in the Form B in the Second Schedule hereto stating that the work specified in Form A is about to be commenced and specifying the property that will be the subject of such hypothec, the name of the owner thereof and the cost of the said work (including the rate of interest) and thereupon the Registrar shall enter such notice in the appropriate volume of the Register Book and such notice shall constitute a legal hypothec against the said premises.

If on completion of the said work the actual cost thereof differs from the estimated cost the Sewerage Authority shall issue a certificate in the Form C in the Second Schedule hereto stating the actual cost of the work. The certificate shall be registered and on registration thereof the cost of the said work as mentioned in the aforesaid notice shall be deemed to be altered accordingly.

(4) An entry on the Register of a notice pursuant to subsection (3) of this section shall be deemed to constitute actual notice to all persons that a legal hypothec exists

against the premises therein referred to and such hypothec shall have priority as mentioned in subsection (1) of this section.

(5) In making any entry on the Register pursuant to subsection (3) of this section the Registrar of Deeds and Mortgages shall accept as conclusive the statements contained in the notice in the Form B creating a legal hypothec or as modified by the certificate of actual cost of the work on completion thereof as the case may be submitted to him by any duly constituted officer of a Sewerage Authority.

(6) A Sewerage Authority may agree that any expenses recoverable by the Authority under this section shall be payable with interest by instalments within such period as it thinks fit, until the whole amount is paid.

(7) On payment of all expenses and interest secured by the hypothec, the Sewerage Authority shall issue a certificate of discharge in the Form D in the Second Schedule hereto and on registration of such certificate the hypothec existing against any premises thereby affected shall be withdrawn.

(8) Where an owner being served with a notice in the Form A in the Second Schedule hereto has complied therewith the Sewerage Authority shall inform the Registrar of Deeds and Mortgages in writing that the provisions of the said notice have been complied with, whereupon the Registrar shall cancel the registration of the said notice and sign the same.

(9) Every Sewerage Authority shall keep at its offices a register of all expenses incurred in respect of work performed by the Authority under this section, and shall show in such register the total amounts thereof, the instalments in which the same have been incurred, the rate of interest payable, the name of the owner of the said premises and the balances for the time being outstanding ; and shall keep such register open at all reasonable times to the inspection of any person, free of charge. Such register and any extract therefrom, certified by any person authorised by the Sewerage Authority in that behalf, shall,

in any proceedings for the recovery of such expenses or interest thereon or any instalments thereof, be *prima facie* evidence of the matters contained therein.

(10) Any sums which a Sewerage Authority is entitled to recover under this Ordinance may be recoverable summarily as a civil debt in any court of competent jurisdiction.

(11) A Sewerage Authority may itself or by any of its officers or by any person generally or specifically authorised in writing by such Sewerage Authority sue for any sum recoverable under this Ordinance or prosecute for any contravention of, offence against or default in complying with any provision of this Ordinance if the contravention, offence or default is alleged to have been committed within the sewerage area coming under the jurisdiction of the Sewerage Authority.

11. (1) Any person served with a notice under section 9 of this Ordinance may appeal against such a notice to a Magistrate exercising jurisdiction in the place where the works are or are proposed to be situated. A further appeal shall within seven days be from a Magistrate's decision to the Supreme Court whose decision shall be final. Appeals.

(2) The time within which the first appeal may be brought shall be twenty-one days from the date on which the notice requiring the works to be executed was served upon the person desiring to appeal.

(3) The grounds of appeal may include any of the following :—

(a) that the notice or requirement contains some defect or error or is not justified by the terms of the law under which it purports to have been made ;

(b) that the work required by the notice to be executed is unreasonable in character or extent regard being had to the value of the premises ;

(c) that the time within which the works are to be executed is not sufficient for the purpose ;

(d) that the person upon whom the notice has been served is unable to pay the cost of the requirements of the said notice and is unlikely in the future to have the ability to pay ;

(e) that in all the circumstances relating to the person upon whom the notice has been served it is not reasonable that the requirements of the notice should be performed ;

(f) that a person upon whom the notice should have been served in respect of a portion of the work has not been served and accordingly the appellant has been charged with the performance of more work than is equitable.

Service of notices.

12. Notices required or authorised to be served under this Ordinance may be served by delivering the same to or at the residence of the person to whom they are respectively addressed or, where addressed to the owner or occupier of premises, by delivering the same to some person residing in or employed on the premises or, if there is no person on the premises who can be served, by fixing the same on some conspicuous part of the premises. Notice may also be served by registered post and if so served shall *prima facie* be deemed to have been delivered at the time when the letter containing the same would be delivered in the ordinary course of post and in proving such service it shall be sufficient to prove that the notice was properly addressed and put in the post.

### PART III.

#### PLANS, EXECUTION AND TESTING OF DRAINAGE.

Plans and particulars to be submitted to the Sewerage Authority.

13. (1) Every person who intends to execute works of drainage in connection with a building or its curtilage including works of maintenance shall give to the Sewerage Authority notice of his intention in writing together with a description of the proposed works and shall as far as may be necessary to show whether the works comply with this Ordinance, send to the Sewerage Authority at the same time a plan, in duplicate, showing the line of the proposed drains and the size,

depth and inclination of each new drain, the position of each manhole, gully trap, ventilating pipe, soil pipe, waste water pipe, rain water pipe, tank, soil fitting and waste fitting and the position and level of the outfall of such drainage and, where this outfall is not a foul water sewer, details of any septic tank, watercourse or soakaway.

(2) No such work shall be executed without the prior approval of the Sewerage Authority provided always that when, in consequence of an existing nuisance, the carrying out of any works of drainage is deemed by a medical officer to be a matter of urgency, such medical officer may issue a certificate authorising the owner or occupier of a building to proceed forthwith with the execution of the necessary works and shall, without delay, notify the sewerage authority that he has issued such a certificate provided that in such a case the necessary plans and particulars shall be submitted to the Sewerage Authority within twenty-one days of the issue of such a certificate and provided further that the issue of such a certificate shall not in any way relieve the person carrying out such works from compliance with the issue of notices regarding testing and with other the requirements of this Ordinance.

(3) Any person who fails to comply with the provisions of this section shall be guilty of an offence against this Ordinance.

14. The Sewerage Authority shall, within a period not exceeding twenty-one days after the receipt by the Sewerage Authority of sufficient notice, description and plan of the proposed works signify in writing to the person submitting such notice its approval or disapproval of the proposed works of drainage and in the case of disapproval shall give to such person the reasons for such disapproval or shall signify any alteration required. Any failure by the Sewerage Authority to give such notice of approval or disapproval within the period above specified shall be deemed to constitute approval to the execution of the works of drainage as proposed. The Sewerage Authority may disapprove the works of drainage

Approval of  
plans by  
Sewerage  
Authority.

pending the receipt of further information which include an analysis of any ground water used or likely to be encountered during the construction of the works.

Notice to  
Sewerage  
Authority by  
persons in-  
tending to  
execute  
drainage  
works.

15. (1) Every person who intends to execute works of drainage shall, unless he has been issued with a certificate of urgency under the provisions of subsection (2) of section 13 hereof, give to the Sewerage Authority, in writing, at least forty-eight hours notice of the date on which such work is to be commenced, and if such work is not commenced on that date an additional notice as aforesaid must be given to the Sewerage Authority.

(2) Every person who executes works of drainage shall give to the Sewerage Authority, in writing, at least twenty-four hours notice to the effect that the whole of the works is ready for inspection and testing by the Sewerage Authority and he shall not cover up such work until the same has been inspected and approved by any duly authorised officer of the Sewerage Authority.

(3) Every person who fails to observe the provisions of the preceding subsections of this section as regards the giving of the required notices or the covering up of works before inspection and testing by the Sewerage Authority shall be guilty of an offence against this Ordinance.

Inspection  
and testing  
of works of  
drainage.

16. (1) Any person who executes any works of drainage shall provide to the duly authorised officer of the Sewerage Authority all labour and materials which may be needful to ensure that such works comply with the requirements of this Ordinance and every drain shall be tested by applying a head of water two feet in excess of the maximum depth of the drain measured from ground level. The drain shall be watertight under such head of water.

(2) Soil pipes, ventilating pipes and waste water pipes may be tested by subjecting them to an air pressure equivalent to five inches of water or by such other reasonable tests as the officer carrying out the inspection may require and such pipes shall be airtight or watertight.

(3) Any defects in the drainage which may be found as a result of tests or inspections as aforesaid shall be made good in such a manner as to conform to the requirements of this Ordinance and no work which fails so to conform shall be used or permitted to be used.

17. (1) Where it appears to a sewerage authority that there are reasonable grounds for believing that in respect of any building, any part of the system of drainage is in such a condition as to be prejudicial to health or a nuisance, the Sewerage Authority may cause such inspections to be made, including opening up of grounds or works, after reasonable notice has been given, as may be necessary to establish the true condition of the system of drainage. Where it appears to a Sewerage Authority that there are reasonable grounds for believing that in respect of any building no satisfactory system of drainage exists then the Sewerage Authority may cause such inspections to be made as to establish the system of drainage, if any.

Power to examine drains believed to be defective or to examine premises believed to be without a satisfactory system of drainage.

(2) If, as a result of such inspections, the system of drainage is found to be satisfactory, the ground or works disturbed during and for the purpose of such inspection shall be reinstated and made good by and at the expense of the Sewerage Authority. If as a result of inspections as aforesaid the system of drainage is not found to be satisfactory then the cost of carrying out such inspection and of reinstatement of the ground or works disturbed during and for the purpose of such inspection shall be paid by or received from the person or persons upon whom the cost of providing a satisfactory system of drainage for such building will devolve.

(3) The owner or owners and the occupier or occupiers of any building shall provide all reasonable facilities and access for the purposes of carrying out inspections to any duly authorised officer of the Sewerage Authority who has been instructed, in writing, by such Authority to inspect such building for the purposes of this section.

## PART IV.

## SEWERS AND LATERAL DRAINS.

Provision of  
foul water  
disposal.

18. (1) A Sewerage Authority may, within its area and subject to the approval of the Governor, without its area —

(a) construct and maintain a foul water sewer :—

(i) in, under or over any street, and

(ii) in or over any land or in or under any building after giving reasonable notice to every owner or occupier of that land or building ;

(b) construct any septic tank, pumping station, rising main, sea outfall or other works necessary for the conveyance and disposal of foul water ;

(c) enter upon any land after giving reasonable notice as aforesaid and make excavations thereon for the purpose of laying down and attaching ventilating pipes to a foul water sewer, and may also support the said pipes against any building or other structure in such manner as the said Authority may deem fit.

(2) In the exercise of its powers under the preceding subsection the Sewerage Authority shall be liable to pay such compensation to any owner or occupier of any private lands as shall be agreed upon between them, but if the parties fail to agree on the amount of compensation then the procedure laid down in the Land Acquisition Ordinance, relating to the assessment of compensation, shall apply.

Ch. 109.

Duty of  
Sewerage  
Authority  
to keep map  
showing foul  
water sewers.

19. Every Sewerage Authority shall keep deposited at its offices and available for inspection by any person at all reasonable hours free of charge, a map showing foul water sewers existing within its area or under its control.

Sewerage  
Authority  
may alter or  
close public  
sewer.

20. A Sewerage Authority may alter the size or the depth or the course of any sewer or may discontinue and prohibit the use of such foul water sewer provided always that any person who is lawfully using the foul water sewer shall, before being deprived of such use by reason of the discontinuance

of prohibition of use of such sewer, be provided with a connection by the Sewerage Authority without expense to himself, to a foul water sewer equally effective for his use.

21. (1) Any person who excavates, opens up or removes or causes to be excavated, opened up or removed the ground around under or near to any foul water sewer shall obtain the prior consent in writing from the Sewerage Authority for the execution of such work and shall carry out any works necessary for the protection of the foul water sewer, as may be required by the Sewerage Authority, at his own expense.

Protection  
of foul water  
sewer.

(2) Any person who knowingly or unknowingly damages or obstructs any foul water sewer shall reimburse the Sewerage Authority against the cost of all expenses reasonably incurred by the Sewerage Authority in making good such damage or in clearing and removing such obstruction.

22. (1) No person shall construct or cause to be constructed any building over or within three feet of a foul water sewer save with the prior written consent of the Sewerage Authority, who may before giving such consent, require that the sewer shall be strengthened to the approval of such Sewerage Authority at the owner's expense.

Proximity of  
buildings to  
foul water  
sewer.

(2) Any person who constructs or causes to be constructed any such building in manner aforesaid without the required consent shall be guilty of an offence against this Ordinance.

23. (1) Subject to due compliance with the requirements of this Ordinance the owner or occupier of any building within a sewerage area shall be entitled to drain foul water from such building into a foul water sewer :

Rights of  
owners and  
occupiers  
within  
sewerage  
area to  
drain into  
foul water  
sewer.

Provided always that such person shall not discharge into the foul water sewer either directly or indirectly —

(a) any liquid containing an appreciable quantity of sugar or fruit juice ;

(b) any liquid from a manufacturing process or factory which is other than soil or waste water except by agreement with the Sewerage Authority ;

(c) any uncontaminated surface water or any sub-soil water ;

(d) any injurious chemicals ;

(e) any material likely to cause an obstruction ;

(f) any liquid from a septic tank.

(2) Before permitting any matter to discharge into a foul water sewer the Sewerage Authority may require to approve analyses of such matter which shall be submitted to them by a competent person to show that the matter will not be injurious to the sewer or prejudicial to the means of disposal of foul water.

(3) Any person who discharges into a foul water sewer any of the objects mentioned in paragraphs (a) to (f) of subsection (1) of this section shall be guilty of an offence against this Ordinance.

Connection  
of drain to  
foul water  
sewers.

24. (1) The work of making connections to foul water sewers and of connecting the same by lateral drains to a drain shall be done by or under arrangements made by the Sewerage Authority and the person or persons employing such connection or lateral drains as a part of a drainage system for the cost of which such person or persons would be responsible shall pay to the Sewerage Authority the cost of providing such connection and such lateral drain wholly, or in such proportion, and in such a time and in such a manner as the Sewerage Authority may determine, having due regard to the degree of benefit.

(2) Where a person had provided a lateral drain for connection to a foul water sewer at his own expense and the premises of other persons are subsequently connected thereto, the Sewerage Authority shall make arrangements whereby the person who provided the said drain shall be reimbursed for

his expenditure in connection therewith in such proportion and in such manner as to the Sewerage Authority may seem equitable.

PART V.

GENERAL.

25. (1) Every building within a sewerage area connected to a foul water sewer and, in the case of the Town of Castries, every building and lot of land within the present limits of the said town, shall pay a sewerage tax at such rate as may be prescribed in the Third Schedule hereto.

Imposition and collection of sewerage tax. No. 7-1955, s. 2.

(2) The rate of the said tax shall be assessed and collected according to the method prescribed for the assessment and collection of House and Land Tax under the Castries Town Council Ordinance and the provisions of sections 73 to 99 of the said Ordinance shall accordingly apply to the said tax.

Ch. 229.

26. (1) All monies received by the Accountant General for the Castries Sewerage Authority shall form a fund to be called the "Castries Sewerage Fund".

Establishment of Castries Sewerage Fund.

(2) The accounts of that fund shall be kept separate from all other accounts in the Accountant General's books.

(3) All monies which may be raised by way of sewerage tax by the Castries Sewerage Authority shall be applied, firstly, in keeping in order and maintaining the sewerage works within the area of the town of Castries, and a distance of half a mile from the limits thereof; secondly, in payment of the interest of the loan raised for the construction of the said works; thirdly, in payment of the sinking fund on such loan in terms of the Loan (Economic Development) Ordinance; fourthly, in payment to the Government of the amount expended by the said Government for maintenance of the said works up to the date of the transfer of the said works to the Castries Sewerage Authority, and lastly, in the creation of a reserve fund for the purpose of meeting the cost of alterations, extensions, renewals and extraordinary repairs to the said works.

Ch. 127.

(4) The Governor in Council may require the Castries Sewerage Authority to set aside from their sewerage rates a sum not exceeding five *per centum* thereof per annum for the purposes of such reserve fund.

Sewerage  
Authority to  
keep copies  
of British  
Standards.

27. Every Sewerage Authority shall keep a copy of all British Standards referred to herein and such British Standards and such copies shall be available for inspection by any person at all reasonable hours free of charge.

Maintenance  
of drainage.

28. The owner of any premises shall, at his own expense, maintain in good order and repair a satisfactory system of drainage where so required by the Sewerage Authority exercising powers under this Ordinance. If any such owner neglects to carry out the necessary works of maintenance and as a result of such neglect the system of drainage is no longer regarded by the Sewerage Authority as satisfactory then the Sewerage Authority may proceed in manner laid down in section 9 hereof to secure the provision to the premises of a satisfactory system of drainage provided always that where a medical officer shall certify in writing that the condition of, or the absence of a system of drainage to the premises constitutes a nuisance, the removal of which as a matter of urgency is necessary for the preservation of public health or convenience, then the Sewerage Authority may, by notice to the owner of the building requiring the provision of a satisfactory system of drainage in manner laid down in section 9 hereof, require the necessary works to be carried out forthwith and may, if the works are not expeditiously put in hand within twelve hours of the time at which the notice requiring the works to be executed was served upon the owner, themselves execute the works and in such circumstances the provisions of section 10 of this Ordinance for securing repayment of the expenses thereby incurred shall apply.

Offences.

29. Wherever this Ordinance requires that any work shall be done in a manner or within a period of time therein stated, any person who fails or refuses to do the said work in the manner or within the period so prescribed shall be guilty of an offence against this Ordinance.

30. Any person guilty of an offence against this Ordinance shall be liable on summary conviction to a fine not exceeding two hundred and fifty dollars and in default of payment to imprisonment with or without hard labour for a term not exceeding six months or to both such fine and imprisonment. Penalty.

31. (1) For the better carrying out of the purposes and provisions of this Ordinance the Regulations set out in the Schedules to this Ordinance shall have effect and be construed as part of this Ordinance. Regulations.

(2) The said Regulations may from time to time be amended, added to or revoked by regulations made by a Sewerage Authority with the approval of the Governor in Council, and all regulations so made shall be laid before the Legislative Council and published in the *Gazette*.

(3) All regulations made under this section shall have the same force and effect as if they were contained in the said Schedules to this Ordinance and the expression "this Ordinance" shall, wherever it occurs in this Ordinance, be construed as including a reference to the said Schedules.

(4) Without prejudice to the generality of the provisions of subsection (2) hereof, a Sewerage Authority may with the approval of the Governor in Council make regulations in respect of any of the following matters—

(a) the rate of interest payable in respect of work performed by a Sewerage Authority by virtue of the provisions of section 10 of this Ordinance ;

(b) any forms, fees and charges relating to the subject matter of this Ordinance ;

(c) prescribing the localities in which collecting hoppers may be constructed and making arrangements for the proper and sanitary disposal in the said hoppers of the contents of the receptacles of pail closets.

## REGULATIONS.

## FIRST SCHEDULE (SECTION 31).

## PART I.

## PRELIMINARY.

1. **SHORT TITLE.** These Regulations may be cited as the Public Health (Sewerage and Drainage) Regulations.

## PART II.

CONNECTION TO FOUL WATER SEWERS AND THE CONSTRUCTION  
OF LATERAL DRAINS.

2. **CONNECTION TO FOUL WATER SEWER.** Where a connection is required to be made to a foul water sewer such connection shall be made as follows:—

(1) where the connection is to be made—

(a) directly into a manhole without a drop connection the stopper of any conveniently situated joinder junction shall be cut away and the spigot of the first of the connecting pipes shall be jointed to the junction using a double collar if necessary: Provided always that if a joinder junction is not conveniently situated a neat hole shall be cut in the walls of the manhole such that the crown of the connecting pipe is level with the crown of the foul water sewer and the first of the connecting pipes shall be built into the manhole wall with its spigot flush with the inside face of the wall and the connection shall be continued and haunched inside the manhole as hereinafter described in regulation 14 of these Regulations;

(b) into a manhole which has been provided with a drop connection the stoppers of the two joinder junctions provided shall be cut away and—

(i) a rest bend shall be jointed to the lower junction and a tumbling bay junction shall be jointed to the upper junction and a vertical pipe shall connect the rest bend to the tumbling bay junction, and the rest bend, tumbling bay junction and vertical pipe shall be surrounded with concrete six inches thick, or

(ii) a small chamber of internal dimensions of one foot cube shall be built against the lower of the two junctions in concrete with one face made monolithic with the wall of the manhole and a vertical pipe built into the roof of the chamber such vertical pipe being extended to and jointed with a square junction jointed to the upper junction, the vertical pipe and square junction being surrounded with concrete six inches in thickness and monolithic with the wall of the manhole ;

(c) to a square junction left for that purpose on a sewer —

(i) the concrete surround to the junction shall be cleaned and the temporary stopper shall be carefully removed, and

(ii) a short length of concrete pipe not less than twelve inches in diameter shall be cut and connected in a watertight manner with two six inch diameter pipes suitably inclined and approximately diametrically opposite to one another and the concrete pipe shall then be laid on a bed of mortar over the open vertical pipe of the junction, and any inside projection on to the junction shall be sloped up to the wall of the pipe with mortar, and

(iii) the open end of the concrete pipe shall be sealed in a watertight manner and this improvised "Y" junction shall be surrounded with and covered with concrete six inches in thickness and monolithic with the concrete, if any, of the sewer: Provided always that a purpose made "Y" junction sealed at one end may be used in place of the improvised junction.

(2) No connection shall be made on a sewer when no square junction has been left for that purpose unless the Sewerage Authority is satisfied that the watertightness of the sewer will not be prejudiced by the connection in which case sufficient pipes may be cut out of the sewer to permit of the interpolation and jointing in the sewer of a suitable junction.

3. LATERAL DRAIN. The open end of the pipe or pipes forming a connection to a foul water sewer shall be jointed to a line of pipes laid in a manner similar to that hereinafter described for drains and extending to a lateral drain manhole constructed in a manner hereinafter described in a suitable position, generally near the boundary of the road opposite, to the point of connection to the foul water sewer, and such manhole shall be provided with a sufficient number of joinder junctions effectually to connect to all drains likely to be laid in the vicinity and the lateral drain shall be extended from this manhole in a direction parallel with that of the sewer to a position capable of receiving the drain from the most remote building

likely to drain into that lateral drain. The lateral drain shall terminate with a bend to facilitate the entry of the furthest drain and it shall be provided with suitable junctions or joinder junctions to permit of other drains or anticipated future drains connecting therewith. Watertight seals shall be provided to all pipes and junctions not immediately to be connected to drains.

### PART III.

#### DRAINAGE.

4. LAYOUT OF SYSTEM OF DRAINAGE. (1) Where the system of drainage is to connect to a lateral drain or to a septic tank or, in the case of surface water, where it is to connect to a watercourse or soakaway the drain shall be laid from the point of connection in a straight line to a manhole near the building and within its curtilage located conveniently for the reception of soil and waste water or for the reception of surface water and the drain shall continue beyond such manhole in a straight line to any further manhole or manholes which may be necessary effectively to receive from the building and its curtilage the whole of the soil and waste water or the whole of the surface water not required to be stored for use. Where the system is for the drainage of foul water, provision must be made as hereinafter specified for the ventilation of the drain at or near the end or ends remote from the lower end of the drain.

(2) Where the system is to connect to a lateral drain which has no convenient junction already provided a manhole must be provided on the lateral drain at the point of connection to the drain.

(3) Where the site coverage is such that the owner's outfall manhole cannot conveniently be within the curtilage of his property the Sewerage Authority may agree to the construction of this manhole within the public space.

(4) No connections shall be made between systems of drainage dealing with foul water and systems of drainage dealing with surface water.

(5) When the dual system of drainage is adopted :

(a) the soil shall generally enter the drain, if above the ground floor by soil pipes and if at the ground floor by drains both connected directly to the nearest suitable manhole.

(b) waste water shall generally enter the drain if above the ground floor by waste pipes and or waste water pipes discharging into collecting heads on waste water pipes, or

connected directly to waste water pipes which discharge over or into gully traps connected to the drain and if at ground floor by discharging over or into gully traps, and thence by pipes connected directly to the nearest suitable manhole.

(c) surface water from above ground floor shall by a suitable arrangement of rain water pipes, be discharged into open channels connecting to road drains or soakaways. No open channels will be permitted to cross public footpaths. Such crossings must be piped and the pipes laid at sufficient depth to allow the footpath surfacing to be carried over the pipe.

(6) Where the one pipe system of drainage is adopted :

(a) soil and waste water shall generally discharge into the soil pipe if the connection is twelve inches or more above the invert of the connecting drain below ground level, and if not, soil shall discharge directly into the drain and waste water indirectly into the drain by discharging over and into gully traps connected to the drain ;

(b) the destruction of the water seal of fittings required to be trapped as hereinafter specified, shall be guarded against by the use of approved deep seal traps. A trap having a water seal of not less than three inches shall be deemed to be a deep seal trap for the purpose of this Ordinance.

(7) No waste water pipe, soil pipe or ventilating pipe shall be trapped but all waste pipes connecting thereto shall be trapped effectually at the sanitary fitting by a trap so constructed as to be capable of maintaining a sufficient water seal.

(8) Every branch drain shall at the point of junction join a main drain obliquely in the direction of the flow of such drain and all bends and turns shall be truly curved and any alteration in the size of the pipe shall be properly tapered and of good shape. Junctions shall wherever practicable be crown to crown.

5. CONSTRUCTION OF DRAINAGE WORKS. (1) Drains shall consist of pipes and channels laid true to line and levels and provided with all necessary bends, tapers and junctions to permit of the contents flowing at a self-cleansing velocity without settlement or scour to the outfall. The pipes shall be watertight and where they pass under a building they shall be of cast iron or shall be surrounded with concrete six inches in thickness save that where any pipe passes through any wall or beam it shall be protected against any settlement of such wall or beam by being separated therefrom with a gap of three inches which gap shall be unoccupied or shall be closed with a material which is incapable of transmitting an excessive load.

6. REQUIREMENTS AS TO DRAINAGE PIPES. (1) Pipes used for drains shall comply with the following requirements :—

- Size.** (a) The pipes shall be of adequate size. Where used for the conveyance of foul water they shall be four inches in diameter except where the Sewerage Authority requires the use of pipes of larger diameter.
- Gradient.** (b) The pipes shall be laid to even falls between manholes to gradients normally of 1 in 40 and not steeper than 1 in 10 provided always that the Sewerage Authority may agree to a flatter gradient.
- Founda-  
tion.** (c) The pipes shall be laid with the barrel of the pipe resting on a good solid and even bed free from irregularities with any projecting socket sunk below the foundation provided that :—
- (i) if an even bed cannot be formed in the natural earth the pipes must be laid on a bed of concrete four inches in thickness under the barrel and eight inches wider than the external diameter of the pipe.
- (ii) if the pipe has less than three feet of cover and forms a part of a system connected to a public sewer it shall be surrounded with concrete six inches in thickness : Provided always that where cast iron pipes are used the Sewerage Authority may waive the requirements of this sub-paragraph.

7. JOINTING OF PIPES USED FOR DRAINS. The jointing of pipes for drains shall be as follows :—

- Jointing of  
spigot and  
socket salt-  
glazed ware  
enamelled  
fireclay  
pipes or  
spigot  
and socket  
concrete  
pipes.** (1) Spigot and socket stoneware pipes or spigot and socket concrete pipes shall be brought up tight together and held concentrically with three or more turns of tarred spun yarn and the remainder of the joint shall be filled flush and bevelled off clear of the pipe angle of sixty degrees with mortar. Any excess mortar shall be removed from the inside of the pipe with a half round scraper.
- Jointing of  
ogee con-  
crete pipes.** (2) Ogee concrete pipes shall have the ogee joint covered with mortar and the pipes shall be brought up tight together. A mortar fillet half an inch thick and four inches wide shall be placed centrally about the outside of the joint for the full perimeter of the pipes and any excess mortar shall be removed from the inside of the

pipe with a half round scraper, provided always that where the pipes are to be surrounded with concrete the fillet may be omitted.

(3) Where Stanton Cornelius jointed pipes are used a suitable rubber ring shall be placed at the spigot end of one of the two pipes to be jointed and the two pipes shall be pushed tightly home by hand, by the use of jacks or by the use of sylvesters whichever method is the most convenient.

Jointing of Stanton Cornelius jointed concrete pipes.

(4) Cast iron spun and steel spigot and socket pipes shall be brought up tight together and held concentrically with three or more turns of tarred spun yarn and the remainder of the joint shall be filled flush with molten lead or lead wool caulked home and finished one-sixteenth of an inch inside the socket.

Jointing of cast iron spun iron and steel spigot and socket pipes.

(5) The flanges of cast iron pipes shall be brought together with a suitable insertion between the flanges which shall then be securely bolted together.

Jointing of flanged cast iron pipes.

(6) The asbestos cement pipes shall be brought together with a suitable rubber ring on both ends and a detachable cast iron joint shall be securely bolted in position and shall be encased with bitumen. Alternatively a suitable asbestos cement sleeve may be rolled into position over the two rubber rings.

Jointing of asbestos cement pipes.

8. REQUIREMENTS AS TO SOIL, VENTILATING AND WASTE PIPES. (1) Pipes used for soil pipes, ventilating pipes and waste water pipes shall comply with the following requirements :

(a) Soil ventilating pipes shall be of adequate size and shall be four inches in diameter except where the Sewerage Authority requires the use of pipes of larger diameter.

Size.

(b) Anti-syphonage pipes to traps of water closets, slop sinks, lavatory basins, sinks, urinals and all other sanitary fittings shall be a minimum of two inches in diameter and connected to a soil and ventilating pipe at least three feet above the highest soil or waste water connection to such soil and ventilating pipe or carry up as for a bent pipe as described in sub-paragraph (c) of paragraph (1) of this regulation and in paragraph (3) of regulation 16.

(c) The pipes shall be securely fixed at intervals not exceeding four feet to the walls of the building or to other suitable support. Where a pipe is to be used either wholly or partially as a ventilating pipe it shall be extended to such a height as effectually to prevent any escape of foul air from such pipe into any building in the vicinity thereof and in no case to a

Fixing.

less height than three feet above the eaves of any adjoining roof or to less height than three feet above the top of any window, door or ventilator which shall be within an unobstructed distance of twenty feet horizontally from the open end of such pipe. The open end of any ventilating pipe shall be provided with an approved balloon.

Jointing of  
cast iron  
spigot and  
socket pipes.

(2) Cast iron spigot and socket pipes shall be brought up tightly together and held concentrically with three or more turns of tarred spun yarn and the remainder of the joint shall be filled flush with molten lead or lead wool caulked home and finished one-sixteenth of an inch inside the socket.

Jointing of  
asbestos  
cement  
pipes.

(3) Asbestos cement pipes shall be brought up tightly together and held concentrically with tarred spun yarn and pointed with mortar.

Connections  
between  
pipes of  
different  
materials.

(4) Where any lead waste pipe is required to connect to any metal or fireclay pipe or fitting the joint shall be made with a suitable brass socket or ferrule the junction of the lead pipe to the socket or ferrule being by means of an efficient wiped joint and the junction of the socket or ferrule with an iron pipe being by means of a caulked lead joint and the junction of the socket or ferrule with a stoneware pipe being by means of mortar.

#### 9. REQUIREMENTS AS TO RAINWATER PIPES, GUTTERS AND FITTINGS.

(1) Pipes used for rainwater pipes and gutters and fittings in connection therewith shall comply with the following requirements:—

Size.

(a) The pipes and gutters shall be of adequate size to prevent any over-flowing or surcharging and shall not in any case be less than two square inches of effective cross sectional area of gutter per hundred square feet of roof drained.

Fixing.

(b) The gutters shall be securely fixed to the building at intervals not exceeding three feet and shall generally be laid at a gradient of 1 in 120 in the case of eaves gutters and 1 in 80 in the case of valley and parapet gutters. Gutters shall discharge into rainwater pipes so placed that not more than thirty feet of gutter enters the rainwater pipe from any one direction.

Jointing of  
cast iron  
pipes, gut-  
ters and  
fittings.

(2) Cast iron pipes, gutters and fittings shall be brought tightly up together and jointed with tarred spun yarn and red and white lead putty.

(3) Asbestos cement pipes, gutters and fittings shall be brought tightly up together and jointed with mortar or with approved bituminous compound.

Jointing of asbestos cement pipes, gutters and fittings.

(4) Pressed steel pipes, gutters and fittings shall be either of the pressed type where a spigot enters a socket and socket and spigot are securely bolted together or the strapped type where two spigot ends bedded on red lead butt over a four inch long strap to which both spigots are bolted.

Jointing of pressed steel pipes gutters and fittings.

(5) Aluminium gutters shall be brought tightly together and jointed with red and white lead putty.

Jointing of aluminium gutters and fittings.

10. CONNECTION OF SOIL PIPES TO DRAIN. The soil pipe shall be connected to the drain without a trap by means of a bend of the same material as the drain and such bend shall be surrounded with concrete four inches thick. An airtight access hatch shall be provided near the foot of the soil pipe in all cases where the soil pipe is situated at a distance greater than ten feet from the manhole to which it first connects.

11. CONNECTION OF SOIL FITMENTS TO SOIL PIPES. (1) Soil fitments connected to the soil pipe shall have water seals two inches deep where the inlet has an internal diameter of not less than three inches and three inches deep where the inlet has an internal diameter less than three inches.

(2) The traps to water closet pans shall be ventilated where and in manner required by paragraph (3) of regulation 16 of these Regulations.

(3) The connection shall not have any bend or angle except where unavoidable in which case the bend or angle shall be as obtuse as possible and shall not reduce the internal diameter of the pipe.

(4) The materials forming the connection shall conform to the requirements for materials forming soil pipes.

12. WASTE PIPES. A pipe used for a waste pipe shall comply with the following requirements :—

(a) It shall discharge so as not to cause dampness in a wall or foundation or floor of a building.

(b) If it discharges to a drain otherwise than by a soil pipe it shall be disconnected from the drain by a gully trap.

(c) It shall be provided with a suitable trap at its junction with the waste water fitting.

(d) If it discharges into a soil pipe it shall be provided with a suitable trap adequately secured against destruction of the water seal. A trap having a water seal of not less than three inches and ventilated where and in manner required by paragraph (3) of regulation 16 of these Regulations shall be deemed to be adequately secured against the destruction of the water seal for the purpose of this Ordinance.

13. GULLY TRAPS. Wherever practicable gully traps shall be located outside buildings and shall be fitted with an approved movable grating or cover and shall if located at ground level be protected against the ingress of surface water by a sufficient kerb. The outlet of the gully trap shall not be of less diameter than four inches.

#### PART IV.

##### MANHOLES.

14. MANHOLES. (1) Manholes shall generally be provided at all points on a sewer, lateral drain or drain —

Location.

(a) where the size, direction or gradient of a sewer, lateral drain or drain undergoes a change ;

(b) where a soil pipe or a waste water pipe connects to a drain or where a branch drain connects to a drain ;

(c) where a rainwater pipe connects to a rainwater drain either directly or through a gully trap or where a branch rainwater drain connects unless the Sewerage Authority agree otherwise ;

(d) and where the above-mentioned circumstances do not exist, at intervals not exceeding three hundred feet from a manhole.

Size.

(2) The minimum internal dimensions of manhole chambers shall be as follows, except that for manholes less than 6 feet deep the Sewerage Authority may permit the use of smaller manholes at its discretion.

##### *Rectangular Manhole.*

Depth to out-going invert.	Length	Width	Soffite of Chamber roof. Height above benching.	Circular manhole. Diameter.	Chamber
Up to 6 ft.	3 ft. 4 inches	2 ft. 3 inches	—	2 ft. 3 inches	—
6 ft. to 15 ft.	4 ft. 6 inches	2 ft. 7½ inches	4 ft. 6 inches	3 ft. 6 inches	—

The minimum internal dimensions of the access shaft, that is, that portion of the manhole which connects the roof of the manhole chamber to the surface of the ground, shall be 2' 3".

(3) *Foundation.* The foundation of the manhole shall be of concrete of thickness as follows : Construc-  
tion.

Depth of outgoing invert.	Minimum thickness of base slab.
Up to 6ft. ....	6 inches
6 feet to 15 feet ....	9 do
over 15 feet ....	9 do

(4) *Walls.* The walls of the manhole shall comply with the following requirements :

(a) the area of the base slab shall extend over the external dimensions of the manhole chamber. Projecting footings need only be provided if the projection is necessary to protect against uplift ;

(b) the walls of the manhole may consist of —

- (i) brickwork, or
- (ii) *in situ* concrete not less than nine inches thick, or
- (iii) precast concrete or reinforced concrete, or
- (iv) precast concrete pipes with *in situ* concrete surround ;

(c) the bricks used shall comply with British Standard 1301 clay engineering bricks Class B or be of such other quality as the Sewerage Authority shall approve and they shall be solidly built in English bond. They shall be rendered inside with mortar. Where the manhole is constructed of precast concrete pipes it shall be surrounded with concrete up to a height of six inches above the top of the highest opening or joint in the pipe forming the manhole chamber provided always that such concrete may be omitted where sufficient benching is laid inside the manholes to make the bottom of the manhole and pipes entering thereabout perfectly watertight.

(5) The roof of the manhole chamber may be constructed —

(a) by means of a brick arch. The arch shall be constructed of not less than two rings of special radiused bricks set in mortar ;

(b) by means of a concrete slab suitably reinforced to carry the weight of the access shaft, ground and traffic above. The slab shall not be less than six inches in thickness. Precast concrete sections may be used such as taper pipes connecting circular manhole chambers with circular access shafts. Taper pipes so used shall not be less than two feet in length.

(6) The access shaft —

(a) if rectangular, shall be corbelled inwards on three sides to reduce the size to that of the internal dimensions of the

Roof of  
manhole  
chamber.

Manhole  
access shaft.

- cover frame. All corbelled work shall be in whole bricks or blocks. The access shaft if circular shall be surmounted by a concrete slab three inches in thickness and the under surface of such slab shall, where it passes over the pipe forming the manhole shaft, be half an inch higher than the highest part of such pipe. The concrete slab shall be adequately supported around its perimeter with concrete or approved hard filling ;
- Manhole cover.** (b) shall be surmounted with an approved manhole cover and frame in accordance with British Standard 497 for manhole covers, road gully gratings and frames or in accordance with British Standard 556 for concrete cylindrical pipes and fittings including manholes, inspection chambers and street gullies and shall be properly bedded in mortar.
- Step irons.** (7) Where the manhole exceeds four feet in depth step irons shall be built vertically down one of the walls immediately under the manhole cover. The step irons shall have a vertical spacing of one foot, shall be staggered horizontally one foot each side of a vertical centre line. Step irons shall be galvanised malleable cast iron in accordance with British Standard 1247 for manhole step irons or may be constructed of reinforced concrete with the approval of the Sewerage Authority. All step irons shall be rigidly built into the side of a manhole.
- Floor of manhole.** (8) The floor of the manhole shall consist of suitable purpose made channels or concrete channels formed *in situ* with a perfectly smooth face and connecting the various pipes entering the manhole to the channel with easy bends discharging into the main channel in the direction of the flow. The manhole of the channel shall be brought up in concrete vertically to the height of the crown of the outgoing pipe and shall be benched at a slope of one in three to the walls of the manhole provided always that where a pipe enters through such wall the concrete shall be brought up to the level of the mid point of such pipe and channels as aforesaid shall be formed in the concrete to convey the discharge from the entering pipe into the main channel where practicable in such manner that the invert of the branch channel is at the same level as the crown of the outgoing pipe.

## PART V.

### SEPTIC TANKS.

15. SEPTIC TANKS. A septic tank shall comply with the following requirements :

- Position.** (a) Except with the approval of the Sewerage Authority it shall be not less than fifty feet from any piped water supply, well, spring or stream of water used or likely to be used by

man for drinking or domestic purposes or for the manufacture or preparation of articles of food or drink for human consumption or for the cleansing of vessels with a view to the preparation or sale of such articles and otherwise in such a position as not to render any such water liable to pollution, or less than ten feet from any dwelling house or public building or any building in which any person is employed in any manufacture trade or business.

(b) It shall be so constructed and situated that there shall be ready means of access for cleaning it and removing its contents without carrying them through any dwelling house or public building or any building in which any person is employed in any manufacture trade or business.

Access for  
cleaning.

(c) The effluent from every septic tank shall discharge through a drain not less than six feet in length into a properly constructed effluent disposal system which shall be not less than 50 feet from any piped water supply, well, spring or stream of water as described in paragraph (a) above.

Deposit of  
effluent.

(d) It shall be of approved design so constructed as to be impervious to liquid either from the outside or the inside and if constructed of brick work or precast concrete sections shall be rendered inside with mortar and it shall be covered and ventilated or provided with an adequate mechanical means for draining off gases to the satisfaction of the Sewerage Authority.

Construc-  
tion.

## PART VI.

### WATER CLOSETS.

16. WATER CLOSETS. (1) The pan shall be of non-absorbent material so constructed as to receive and contain sufficient water and to allow any filth to fall free of the sides directly into the water.

(2) The flushing apparatus shall be such as to secure the prompt and effectual flushing and cleansing of the pan. It shall be supplied with an adequate supply of water and shall not be automatic in operation.

Flushing  
apparatus.

(3) The pan shall be provided with a sufficient trap which shall not be a "D" trap or Masons Dipstone. Where the contents of the pan discharge into a soil pipe which also receives the discharge from another pan or waste fitting or other soil fitting the trap of the pan shall be ventilated by an anti-syphonage pipe having an internal diameter not less than two inches and be connected with the arm of the soil pipe at a point not less than three and not more than twelve inches from the highest part of the trap on that

Traps.

side of the water seal which is nearer to the soil pipe and shall have an open end as high as the top of the soil pipe or shall be carried into the soil pipe at a point not less than three feet above the highest connection to the soil pipe.

Lighting and  
ventilation.

(4) The water closet—

(a) shall be entered either directly from the external air, or from a ventilated lobby or directly from a room used solely for sleeping ;

(b) shall have at least one external wall, or a roof, and shall have a window of an area of 2 square feet exclusive of the frame and in addition a permanently open ventilation of at least 50 square inches ;

(c) shall have openings for light and ventilation which shall be placed at as high a level as practicable on the external wall, or in the roof, and shall communicate directly with the external air.

Fixing of  
water closet  
pans.

(5) Where the pan is to be fixed—

(a) above floor level the whole of the pan and the trap thereto shall be fixed entirely above the level of the floor of the water closet and shall not be cased round or enclosed in any manner ;

(b) below floor level it shall be supported on a sub-floor in such a manner that the upper face of the squatting slab shall be at the level of the floor of the water closet and the pan and the trap thereto shall be encased in concrete at least three inches thick.

## PART VII.

### URINALS.

Receptacles. 17. URINALS. (1) The urinal shall be provided with a basin stall, trough or other suitable receptacle or receptacles of non-absorbent material and the outlet therefrom shall be provided with a sufficient grating.

Flushing  
apparatus. (2) Where a water supply is available the urinal shall be provided with suitable apparatus for the effectual flushing and cleansing of the receptacles provided but no part of the urinal apparatus shall be directly connected with a water distributing pipe.

Traps. (3) If the urinal can be entered from within the building and is constructed so as to discharge into a soil pipe which also receives the discharge from another urinal or from a water closet, bath, sink,

lavatory, basin or the like the urinal shall be provided with a sufficient trap and the trap of the urinal shall be ventilated by an anti-syphonage pipe having an internal diameter of not less than that of the trap or two inches whichever is the less and be connected with the waste pipe from the urinal at a point not less than three and not more than twelve inches from the highest part of the trap on that side of the water seal which is nearer to the soil pipe and shall have an open end as high as the top of the soil pipe or shall be carried into the soil pipe at a point not less than three feet above the highest connection to the soil pipe.

PART VIII.

PAIL CLOSETS.

18. PAIL CLOSETS. (1) Every person who constructs a pail closet—

(a) shall construct the apartment of the same dimensions as if it were a water closet, and at a minimum distance from any portion of a habitable building of ten feet and forty feet from any well spring or stream of water used or likely to be used by man for drinking or domestic purposes or for the manufacture or for the preparation of articles of food or drink for human consumption or for the cleansing of vessels with a view to the preparation for sale of such articles and otherwise in such a position as not to render any such water liable to pollution ;

(b) shall construct the walls of brick or concrete rendered internally with mortar or of other materials approved by the Sewerage Authority ;

(c) shall provide it with a sufficient opening for lighting and ventilation as near the top as practicable and communicating directly with the external air ;

(d) shall construct the floor of concrete or other impervious non-absorbent material approved by the Sewerage Authority ;

(e) shall construct the seat, the aperture in such seat and the space beneath such seat of such dimensions as to admit of a movable receptacle for filth being placed and fitted beneath such seat in such a manner and in such a position as effectually to prevent the deposit upon the floor or sides of the space beneath such seat or elsewhere than in such receptacle of any filth which may from time to time fall or be cast through the aperture in such seat and for this purpose every such receptacle shall be located in the correct position

by suitable stops. The seat shall rest upon brackets or piers formed of non-absorbent material and so constructed that a sufficient part may be lifted in a vertical position as to afford adequate access to the space beneath the seat for the purpose of cleansing such space or of removing therefrom or placing and fitting therein the appropriate receptacle for filth or shall otherwise provide adequate means of access to such space for the purposes aforesaid. The space beneath the seat shall be adequately protected against the ingress of flies or mosquitoes.

(2) The receptacle shall be of a non-absorbent material so constructed that its contents shall not escape.

#### PART IX.

##### EARTH CLOSETS.

19. EARTH CLOSETS. An earth closet shall comply with the following requirements :—

- Entrance.** (a) Its only direct entrance shall be from the external air.
- Position.** (b) It shall not be less than ten feet from any part of any dwelling house and forty feet from any well, spring or stream of water used or likely to be used by man for drinking or domestic purposes or for the manufacture or for the preparation of articles of food or drink for human consumption or for the cleansing of vessels with a view to the preparation for sale of such articles and otherwise in such a position as not to render any such water liable to pollution.
- Lighting and ventilation.** (c) It shall be provided with a sufficient opening for lighting and ventilation as near the top as practicable and communicating directly with the external air.
- Floors.** (d) The floor shall be of non-absorbent material which shall in every part including the part beneath the seat, be not less than three inches above the surface of the adjoining ground and have a fall or inclination towards the entrance door of not less than one-half of an inch to the foot.
- Construction of receptacles.** (e) The receptacle shall be :—
- (i) of a capacity not exceeding two cubic feet or such less capacity as may be sufficient to contain all faecal matter, earth or other material which may accumulate therein during a period of not more than one week ;
- (ii) of non-absorbent material so constructed and placed that its contents shall not escape by leakage or otherwise or be exposed to rainfall or to drainage of any waste water or liquid refuse and no part of the receptacle shall communicate with any drain.

(f) It shall be provided with a suitable vessel of adequate capacity for dry earth or other suitable deodorising material so constructed and placed as to admit of ready access for depositing therein the necessary supply of the earth or other material and it shall be provided with sufficient means for applying the earth or other material to the faecal matter in the receptacle.

Dry earth or deodorising material.

(g) The containing walls of the space beneath the seat except such opening as may be necessary for affording access to the space shall be impervious to moisture.

Walls.

(h) The seat, the aperture in the seat, and the space beneath the seat, shall be of such dimensions that the receptacle can be so placed and fitted beneath the seat as to prevent the deposit of faecal matter elsewhere than in the receptacle. The space beneath the seat shall be adequately protected against the ingress of flies or mosquitoes.

Seats and spaces for receptacles.

(i) Adequate access for cleansing the space beneath the seat and for removing therefrom or placing and fitting therein the receptacle shall be provided by means of the adjustment of or removal of the seat or by some other suitable means.

Access to spaces for receptacles.

#### PART X.

##### CONVEYANCE OF SURFACE WATER TO DRAIN OR WATERCOURSE.

20. CURTILAGE TO BE KEPT FREE FROM STATIC WATER. Static water shall not be permitted other than in specially constructed water tanks and where the impermeability of the curtilage renders such a precaution necessary the surface shall be graded, levelled or otherwise altered to permit of the effective discharge of surface water to gully traps or impervious watercourse or to soakaways.

21. ROOF TO BE EFFECTUALLY DRAINED. (1) The roof of a building (whether flat or pitched) shall be so constructed as to drain effectually to :—

(a) a sufficient system of rainwater pipes and gutters connected with a suitable number of pipes discharging into gully traps or to a water tank, or

(b) an impervious watercourse.

(2) A sufficient system of rainwater pipes and gutters shall consist of :

(a) eaves gutters downpipes and fittings formed of pressed steel or conforming to British Standard 1091 for pressed steel gutters pipes fittings and accessories, or

(b) eaves gutters downpipes and fittings of asbestos cement conforming to British Standard 569 for asbestos cement spigot and socket rainwater pipes, gutters and fittings, or

(c) eaves gutters downpipes and fittings formed of cast iron conforming to British Standard 460 for cast iron spigot and socket rainwater pipes fittings and accessories, or

(d) eaves gutters downpipes and fittings formed of aluminium conforming to British Standard 1430 for aluminium rainwater goods cast and extruded, or

(e) eaves gutters downpipes and fittings formed of copper or zinc conforming to British Standard 1431 for wrought copper and wrought zinc rainwater goods, or

(f) eaves gutters downpipes and fittings formed of other material as approved by the Sewerage Authority.

(3) Rainwater pipes shall be of adequate size to prevent surcharging and overflowing and shall not project beyond the limits of the curtilage of the building except by agreement with the parties concerned and in any case the rainwater downpipes shall not project over a public footway at any point which is less than ten feet from the ground. Pipes shall be securely fixed to the wall of the building and shall terminate either below the cover of a water tank or over a gully trap or impervious watercourse by means of a shoe.

(4) All eaves gutters shall be supported at intervals not exceeding 3 feet by suitable brackets and shall be properly aligned so as to provide continuous and even fall to the point of discharge in such a manner that no part of such eaves gutters shall be more than thirty feet of eaves gutters from a point of discharge save that with the approval of the Sewerage Authority such distance may be exceeded when the rainwater downpipes are connected to storage tanks. The eaves gutters shall be of adequate size to prevent surcharging and overflowing and shall be provided with proper stopped ends and shall discharge by proper outlet nozzles to rainwater pipes.

## PART XII.

### WATER TANKS.

22. WATER TANKS. A tank constructed or fitted in connection with a building and intended to be used for the storage of rainwater shall comply with the following requirements—

Overflow.

(a) It shall be provided with an overflow pipe so placed and so fitted as not to allow animals to enter through it and capable of discharging to a drain or watercourse.

(b) The tank shall be provided with a solid and close fitting cover so constructed and fitted as to exclude all polluting matter mosquitoes and the like and if such cover is fixed it shall have a manhole fitted with a proper iron cover and of sufficient size to allow the tank to be entered and cleaned and it shall be provided with a sufficient ventilator the open end of which shall be fitted with a cover of copper gauze. Coverings.

(c) The tank shall be constructed or lined with an impervious material and shall be watertight and of sufficient strength to resist all internal and external forces likely to be applied to the tank. Water-tightness.

PART XII.

MINERAL SULPHATES.

23. MINERAL SULPHATES. Where the Sewerage Authority is satisfied that any concrete or mortar used on drainage works is liable to encounter any water containing calcium sulphate, magnesium sulphate or sodium sulphate equivalent in concentration to 100 parts or more of sulphur tri-oxide per 100,000 or to encounter a clay containing one-fifth or more of one per cent. of its dry state of such sulphates then the Sewerage Authority may require the use of high alumina cement in all cases where cement is employed on such drainage works.

SECOND SCHEDULE.

FORM A.

Section 9 (2).

*Notice to Provide a Satisfactory System of Drainage.*  
Under Section 9 (2) of the Public Health (Sewerage and Drainage) Ordinance.

To.....  
.....

You are hereby required within \_\_\_\_\_ days from the date of this notice to provide a satisfactory system of drainage consisting of \_\_\_\_\_ in respect of your premises situate at No. \_\_\_\_\_

Street in the town of \_\_\_\_\_ If you fail to provide the required system of drainage within the time herein prescribed the Sewerage Authority may proceed to do the work itself in accordance with the provisions of section 10 of the aforesaid Ordinance.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 19 \_\_\_\_\_

.....  
*Chairman/Secretary Sewerage Authority.*

## FORM B.

Section 10 (3).

*Notice Creating Legal Hypothec.*

Under Section 10 (3) of the Public Health (Sewerage  
and Drainage) Ordinance.

To the Registrar of Deeds and Mortgages,  
Registrar's Office,  
Castries.

I hereby give notice that certain work consisting of 1  
will be commenced on the                      day of                      19                      on the  
premises situate at 2  
the property of 3  
and the estimated cost 4  
of such work is                      dollars                      cents.

Dated this                      day of                      19

.....  
*Chairman/Secretary Sewerage  
Authority.*

1. Here state nature of work.
2. Here state number of lot and name of street.
3. Here state name of owner.
4. Delete if actual cost is known.

## FORM C.

Section 10 (3).

*Certificate of Actual Cost of Work on Completion Thereof.*

Under Section 10 (3) of the Public Health (Sewerage  
and Drainage) Ordinance.

To the Registrar of Deeds and Mortgages,  
Registrar's Office,  
Castries.

With reference to the notice creating a legal hypothec registered  
in Volume                      No.                      on premises situate at 1  
the property of 2                      . I hereby certify that  
the actual cost of the work performed in respect of such premises  
is

.....  
*Chairman/Secretary Sewerage  
Authority.*

1. Here state number of lot and name of street.
2. Here state name of owner.

FORM D.

Section 10 (7).

*Certificate of Discharge of Hypothec.*

Under Section 10 (7) of the Public Health (Sewerage and Drainage) Ordinance.

To the Registrar of Deeds and Mortgages,  
Registrar's Office,  
Castries.

I hereby certify that all charges for work performed in respect of premises situate at 1 the property of 2 have been paid and the hypothec on the said premises created by the notice registered in Vol. No. is hereby discharged.

Dated this day of 19

.....  
*Chairman/Secretary Sewerage  
Authority.*

1. Here state number of lot and name of street.
2. Here state name of owner.

—————  
THIRD SCHEDULE.  
—————

SEWERAGE RATE.

Section 25 (1).

The Sewerage Rate payable under Section 25 of this Ordinance shall be at the rate of seven *per centum* of the assessed annual rental or value for rental of the building or lot of land and the Authority may by resolution from time to time vary the rate to a rate not exceeding seven *per centum*, with the approval of the Governor in Council and the sanction of the Secretary of State. No. 7-1935, s. 3.